THOMSON

PARTS LIST
LISTE PIECES DETACHEES
ERSATZTEILLISTE
LISTA PARTI DI RICAMBIO
LISTA DE PIEZAS DE REPUESTO

THOMSON
21HT195
Chassis ITC008

MODULES

MAIN	IC008F56T01SDJ0	21459580
CRT	CRTI00840	21285050
DVD	DVD MODULE DMM05A-2 EUDVD	56035210
FAV	FAV USB TV/TVD008	21446770
IFAC	POWER INTERFACE I00802	21487910
KDB	KDBI00805	21455780
SCI	SCII00814	21409460

FZP60,61	MP315	⚠	10575090
FZP66,93	MP50	⚠	10457120
FZP200,201	TE5-T NO 396 3.15A 125V	⚠	21210090
FZP202	TE5-T NO 19396 2.5A 125V	⚠	21210080
FZP205,206,207	TE5-T NO 396 1.0A 125V	⚠	21210050
FZP20,FZX01	TE5-T NO 396 500MA 125V	⚠	21210040
GK001	TFMS5330B		20627780
IB001	TDA6107JF/N3		10804130
IF001	STV8172A		56012920
IP001	TLP621 GR(D4-LF2 T)		20827900
IP030	STV8130A+		10748720
IP031	MC7805/ACT		46007400
IP050,201,202,203	TL431ACLP		10724920
IR001	CAT24WC08P		21133090
IS100	MSP3415G-PO-B8		10714120
IS200	TDA7263		10281150
IV001	TDA9554PS/N3/3 SOFT ED1 VERS. S9.00		35989320
IX401	LA79500E FLAT		21160230
IX408	FSAV330M FLAT		21391640

|			
TD900	MMBT3906LT1 SMD		20628200
TI030,045,TR003	DTC144EK SMD		16007030
TI050,TL050	BC856B SMD		16006310
TI060,070,TL031,062,TX001,004	BC846B SMD		16006260
TL032,TR005	BC337-40		45001466
TL035	S2055N		20578760
TL060	BCR191 SMD		16006910
TL061	RN1409 SMD		20688820
TP020	STP6NB90FP		25460310
TP022,052,206	BC548B		16000930
TP023,205,TX009	KTC8550D		21039270
TP025	BC558B		16001110
TP171,175,176,177,193,TS201,204,TX006,007,010	BC848B SMD		16006290
TP192	BC858B SMD		16006330
TP201,202,203,204	KTC2026Y		21141190
TR001	BCR185 SMD		16006900
TR002	BCR141 SMD		16006890
TS202,203	RN1402 (TE85L/R) SMD		10966200
TX008	RN2402 SMD		20205800
TZ01	S1423	⚠	50888780
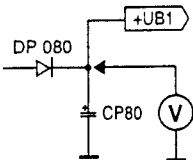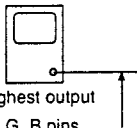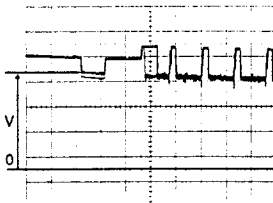
DB004	1N4004	44009009
DB030,031,050,051,070,071,DP037,097	BAV21	44044407
DD900,DX007,009,011,017	BZT55C5V1 SMD	15196090
DF001	BZW04-48	10351880
DF002,003,DH004,DK005,006,DL04,030,062,DP071,205,DV071,DZ05,JP212	1N4148	44009209
DF010,DL011,013,035,DP036	1N4001	16008160
DF101,102,DJ121,DL072,DS204,DV070,DX005,019,024,DZ01	LL4148 SMD	16012450
DH001	BZX55B33	80442730
DI030,040	BA782S SMD	20542050
DJ120,DK003,004,DR001	BZX55B5V6/ZPD5V6 2%	70438200
DL010,025,040,060,DP025,026,093	RGP10G	10459090
DL012	EGP10D	20953640
DP002,003,004,005	BYW27-1000	10455390
DP023,030	BZX55C8V2	11073660
DP027,040	BZX55C27	60447870
DP033	BZX55B15/ZPD15 2%	80444020
DP057,207	BZX55C9V1	90578100
DP061	SB560	20956430
DP063	BYW98-200 3.0A	15103710
DP080	STTH5L06	21285880
DP095,DZ03	ZPD10 2%	80444160
DP200,201,202	1N5822	44058204
DP203	RGP15G	10272800
DP206	BZX55C3V9	80444130
DU001,002,003,004	MMSZ6V8T1 SMD	15580490
DV002,003,004	MMSZ10T1 SMD	15580530
DX001	BZT52C13 SMD	15583750
DX002	BZT52C3V9 SMD	15583620
DX018	BZT52C5V6 SMD	15583660
DX020,021	MMSZ12T1 SMD	15580550
GK003	TLXR4400 LED	16011680

VERSION 1   10 / 2005
VERSION 2   00 / 0000   36013360

1/3

ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONE - AJUSTES

(MAIN) SYSTEM VOLTAGE +UB1	-	$\bullet + \varnothing + \circledcirc = 50\%$ TV to AV : Black test pattern AV ⬜	DP 080 ──▷──●── +UB1 ⊥ CP80 Ⓥ	(see table below)
FOCUS	LL05	$\bullet + \varnothing + \circledcirc = 50\%$ ▦ Test pattern (standard values)	◁	Sharp picture
U G2 / CUTOFF **METHOD 1** Measurment	LL05 SCREEN Focus Block	$\bullet + \varnothing + \circledcirc = 50\%$ TV to AV : Black test pattern AV ⬜	highest output R, G, B pins CRT socket	(waveform) 100:1 probe 2ms / div Y= 20V/div DC

+UB1 voltage table:

TUBE	UB1 voltages	JL990-992
19V Thsi	106V ± 2V	JL992
19V ChungHwa	109V ± 2V	JL990 & JL991
20V TF LGS	123V ± 2V	JL990 & JL991
20V TF Orion	123V ± 2V	JL990 & JL991
21" TF TTD II	123V ± 2V	JL990 & JL991
21" OT	114V ± 2V	JL992
25"TF Toshiba	126V ± 2V	JL992
27V 1R TTD	126V ± 2V	JL990 & JL991
27V VHP TTD	126V ± 2V	JL992
27V/29" TF Samsung	126V ± 2V	JL992
27V/29" TF TTD II	126V ± 2V	JL992
28" MP	132V ± 2V	JL992
33" MP	132V ± 2V	JL992
32V/36 VHP	132V ± 2V	JL992
32V TF Toshiba	132V ± 2V	JL992
32V/34" TF TTD	132V ± 2V	JL992

V Cut-off table:

Tube	V Cut-off
21" OT 90°	125V +/- 3V
21" XF-TTD	125V +/- 3V
21" XF Toshiba	125V +/- 3V
28" MP	125V +/- 3V
29" TF Samsung	125V +/- 3V
29" XF TTD II	125V +/- 3V
33" MP	125V +/- 3V
34" XF TTD	125V +/- 3V

U G2 / CUTOFF **METHOD 2** SERVICE MODE (According to software version).	SERVICE MODE	Alternative method : see Service Mode p. 9 Autre méthode : voir réglage dans le service mode p. 9 Siehe Service Mode S. 9 Metodo alternativo :vedi Service Mode p.9 Método alternativo : ver Modo Servicio pág. 9

EAST-WEST MODULE - MODULE EST-OUEST - OST-WEST-MODUL - MODULO EST-OVEST - MODULO ESTE-OESTE

GEOMETRY	TV : AV1 Test pattern Standard TV - Settings : $\varnothing + \circledcirc + \bullet = 50\%$ ▦	◁	Correct picture
(EWM)	PL140 PL141 PL143 SERVICE MODE	**(GB)** - Please refer to geometry Mode alignment (110° tube) , page 10, to adjust the East West Module (EWM) **(F)** - Se référer à la méthode d'alignement des géometries (tubes 110°), page 10 pour effectuer les réglages du Module Est-Ouest (EWM). **(D)** - Abgleich des Ost-West-Modules: Siehe Geometrie-Abgleich (110°), Seite 10. **(I)** - Per le regolazioni del Modulo Est-Ovest fare riferimnto al modo allineamento geometria (tubi 110°), pagina 10. **(E)** - Para los ajustes del módulo Este-Oeste (EWM) ver la página 10, modo ajuste geometría (tubo 110º) PL140 PL141 PL143

LOCATION OF CONTROLS - EMPLACEMENT DES REGLAGES - LAGEPLAN
EINSTELLER - POSIZIONE REGULATORI DI SERVIZIO - SITUACIÓN DE LOS AJUSTES

USYS

TUBE	UB1 voltages	JL990-992
19V Thai	106V ± 2V	JL992
19V ChungHwa	109V ± 2V	JL990 & JL991
20V TF LGS	123V ± 2V	JL990 & JL991
20V TF Orion	123V ± 2V	JL990 & JL991
21" TF TTD II	123V ± 2V	JL990 & JL991
21" OT	114V ± 2V	JL992
25"TF Toshiba	126V ± 2V	JL992
27V 1R TTD	126V ± 2V	JL990 & JL991
27V VHP TTD	126V ± 2V	JL992
27V/29" TF Samsung	126V ± 2V	JL992
27V/29" TF TTD II	126V ± 2V	JL992
28" MP	132V ± 2V	JL992
33" MP	132V ± 2V	JL992
32V/36 VHP	132V ± 2V	JL992
32V TF Toshiba	132V ± 2V	JL992
32V/34" TF TTD	132V ± 2V	JL992

TL035
TL035A
BF002
BL005
BL005A
JP065
IF001

+UA: AUDIO VOLTAGE
2X3W = UA =20V+/- 1V
DP061
DP080
DP093
DP063
6V5 12VSTBY 6VSTBY
8VOS
8VV
JP082
BP090

V12
11V< V12 < 13,5V
JP056
IP030
FZP30
JP068
8VS
8V
IP030A
3V3UP
3,3V
JP022
IP031
5VS
5V
JP034
DP099
BP001
DP035
BR004
IR001
IS200
BS003 BS004 CS211 BS002
BV004
BR008

FOCUS
G2
cut-off
SCREEN

Part of board connected to mains supply.
Partie du châssis reliée au secteur.
Primärseite des Netzteils.
Parte dello chássis collegata alla rete.
Parte del chasis conectada a la red

⚠ Use isolating mains transformer -
Utiliser un transformateur isolateur du secteur -
Trenntrafo verwenden -
Utilizar un transformador aislador de red -
Utilizzare un transformatore per isolarvi dalla rete

A51QDJ420X03 CATHODE RAY TUBE	⚠ 56038460
A51QDJ420X03 TUBE CATHODIQUE	
A51QDJ420X03 FARBBILDROEHRE	
A51QDJ420X03 TUBO CATODICO	
A51QDJ420X03 T.R.C	
DEGAUSSING COIL 445MM	⚠ 10738830
BOBINE DE DEMAGNETISATION 445MM	
ENTMAGNETISIERUNGSSPULE 445MM	
BOBINA DI SMAGNETIZZAZIONE 445MM	
BOBINA DE DESIMANTACION 445MM	
POWER SUPPLY LEAD	⚠ 10260880
CORDON D'ALIMENTATION	
NETZKABEL	
CAVO DI ALIMENTAZIONE	
CABLE DE ALIMENTACION	
8R0 OHM 10W LOUSPEAKER 42X105MM	25737950
8R0 OHM 10W HAUT PARLEUR 42X105MM	
8R0 OHM 10W LAUTSPRECHER 42X105MM	
8R0 OHM 10W ALTOPARLANTE 42X105MM	
8R0 OHM 10W ALTAVOZ 42X105MM	
RC311TA1G REMOTE CONTROL	21282880
RC311TA1G TELECOMMANDE	
RC311TA1G FERNBEDIENUNG	
RC311TA1G TELECOMANDO	
RC311TA1G TELEMANDO	
CORD STOPPER	25307670
ATTACHE CORDON SECTEUR	
ZUGENTLASTUNG	
BRIDA CORDONE DI ALIMENTAZIONE	
SUJECION CABLE DE ALIMENTACION	
SPACER FRONT PANEL	25587590
ENTRETOISE FACADE	
DISTANZSCHEIBE FRONTPLATTE	
DISTANZIATORE PANNELLO FRONTALE	
ESPACIADOR PANEL FRONTAL	
COVER TRAY CD CH11TH	25828130
CACHE TIROIR CD	
ABDECKUNG SCHUBLADE CD	
COPERCHIO CASSETTO CD	
CUBIERTA CORREDERA CD	
LOUDSPEAKER GRID LEFT/RIGHT BK20TH	25828160
GRILLE HAUT PARLEUR GAUCHE/DROIT BK20TH	
LAUTSPRECHERGITTER LINKS/RECHTS BK20TH	
GRIGLIA ALTOPARLANTE SINISTRA/DESTRA BK20TH	
REJILLA ALTAVOZ IZQUIERDA/DERECHA BK20TH	
REAR PANEL AL01TH	⚠ 35949340
DOS AL01TH	
RUECKWAND AL01TH	
PANNELLO POSTERIORE AL01TH	
TAPA POSTERIOR AL01TH	
BUTTON STRIP TV CH11TH	25828190
BARRETTE DE TOUCHES TV CH11TH	
TASTENLEISTE TV CH11TH	
PIATTINA TASTI TV CH11TH	
PLACA DE TECLAS TV CH11TH	
LED WINDOW	25793110
GLACE LED	
LED FENSTER	
VETRO LED	
CRISTAL LED	
INFRARED WINDOW	25793120
GLACE INFRAROUGE	
INFRAROT FENSTER	
VETRO INFRAROSSO	
CRISTAL INFRARROJO	
FCB SUPPORT AL01TH	35949310
SUPPORT FCB AL01TH	
FCB HALTER AL01TH	
SUPPORTO FCB AL01TH	
SOPORTE FCB AL01TH	

ON/OFF SWITCH SUPPORT	25793080
SUPPORT CONTACTEUR MARCHE/ARRET	
HALTER EIN-AUS SCHALTER	
SUPPORTO CONTATTORE ACCESO/SPENTO	
SOPORTO CONTACTOR MARCHA/PARADA	

MAINTENANCE TOOLS
MAINTENANCE
WERKZEUG FUER DAS GERAET
UTENSILI DI MANUTENZIONE
MANTENIMIENTO

ITC008 POWER SUPPLY REPAIR KIT	35711620
ITC008 KIT MAINTENANCE ALIMENTATION	
ITC008 REPARATURSET NETZTEIL	
ITC008 KIT PER RIPARARE ALIMENTAZIONE	
ITC008 KIT DE REPARACION ALIMENTACION	
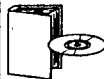
15HT195/21HT195 UM THOMSON	60179990
15HT195/21HT195 NU THOMSON	
15HT195/21HT195 BA THOMSON	
15HT195/21HT195 IU THOMSON	
15HT195/21HT195 IU THOMSON	
CDROM ITC008	35765170
CDROM ITC008	
CDROM ITC008	
CDROM ITC008	
CDROM ITC008	
ITC008 SERVICE MANUAL	35696810
ITC008 DOC TECHNIQUE	
ITC008 TECHNISCHE DOKUMENTATION	
ITC008 DOCUMENTAZIONE TECNICA	
ITC008 DOCUMENTACION TECNICA	
ITC008 SERVICE MANUAL VERSION 2	35922830
ITC008 DOC TECHNIQUE VERSION 2	
ITC008 TECHNISCHE DOKUMENTATION VERSION2	
ITC008 DOCUMENTAZIONE TECNICA VERSION 2	
ITC008 DOCUMENTACION VERSION 2	
21HT195 PARTS LIST	36013360
21HT195 LISTE DE PIECES DETACHEES	
21HT195 ERSATZTEILLISTE	
21HT195 LISTA PARTI DI RICAMBIO	
21HT195 LISTE DE PIEZAS DE REPUESTO	

FI010	OFWK6257K FOS	10545030
FI020	K9659D 33M9HZ FOS	21132460
FI030	40M4HZ	10664720
FI050	5M74HZ	20338170
QS101	18M432HZ	21414780
QV001	12M0HZ	25418130

LH010,LI032, LL040,LS103, LV001,004	10UH	15039640
LI031	6,8UH 5%	13052120

RB001,004, RL026	1K5 OHM 5% 0,50W		10121880
RB013	10R0 OHM 10% 0,50W		15000160
RB031,051,071	560R0 OHM 10% 0,50W		10257590
RF004,006	1K5 OHM 1% 0,25W		80437630
RF007	1R21 OHM 1% 0,70W		13010820
RF008	1R5 OHM 5% 0,25W	⚠	13063950
RL010	0R1 OHM 10% 0,40W	⚠	15022510
RL012	0R22 OHM 5% 0,50W	⚠	10305450
RL040	47R0 OHM 5% 0,35W	⚠	20923340
RP001	4R7 OHM 5% 10W		11063840
RP002	18R0 OHM 230V PTC	⚠	10509980
RP009	470K0 OHM 5% 1W	⚠	21185660
RP015	10M0 OHM 5% 1W	⚠	21090250
RP020	0R68 OHM 5% 2,5W		20822410
RP056	130K0 OHM 1% 0,25W		15514320
RP210	47R0 OHM 5% 3W		90572360
RP281	1R0 OHM 1% 0,25W		15015430
RS103	3R9 OHM 5% 0,25W		15009970
RS216,219	4R7 OHM 5% 0,35W	⚠	10226310
RV001	15K0 OHM 5% 0,10W		10135050
RZ05	29K4 OHM 1% 0,25W		60442370
RZ07	27K4 OHM 1% 0,25W		80437740

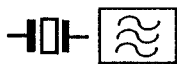|			
CB001	10N0F 3K0V		14036450
CB003,006, CL041	10UF 20% 250V		13039480
CB004	47N0F 5% 250V		40433080
CF004	1N0F 10% 50V		10138550
CH008,CV002	100U0F 20% 25V		43269060
CI055,CV003	100P0F 10% 16V		20947390
CL010,012,026, 040,CP026,068	330P0F 10% 1K0V		14030320
CL021	8N8F 3,5% 1K6V	⚠	43416000
CL022	330P0F 10% 2K0V		20833150
CL023	270N0F 5% 250V	⚠	21265580
CL060,CP097, CV072	4U7F 20% 100.0V 85C		13070930
CP001,002	100N0F 20% 275V	⚠	10364920
CP004,005,006	1N5F 10% 1K0V		20338740
CP008	150U0F 20% 400V		13050060
CP009	2N2F 20% 1K6V		10571760
CP015	2N2F 20% 400V	⚠	10660820
CP050	470P0F 5% 63V		15001790
CP063	680P0F 5% 63V		15001830
CP080	220U0F 20% 200V		10658570
CP088	2N2F 2K0V		14036020
CV001,004	220N0F 10% 10V		20947540
CV005	2N7F 10% 50V		10138630
CV006,008	1U0F 10% 6.3V		25491000
CV007	4.7NF 10% 50V		10138710

LL005	FBT JF0501-19544	⚠	21323130
LL026	58U0H	⚠	21426470
LL032	DRIVER		20936440
LP002	60MH	⚠	21315930
LP003	SMTEU-D160	⚠	21261120

OTHER PARTS
AUTRES PIECES
SONSTIGE TEILE
ALTRE PARTI
OTRAS PIEZAS

BB005	CATHODE RAY TUBE SOCKET	⚠	1506533A
	SUPPORT TUBE CATHODIQUE		
	BILDROEHRENFASSUNG		
	SUPPORTO TUBO CATODICO		
	SOPORTE T.R.C		
BJ110	HEADPHONE SOCKET		56029020
	PRISE CASQUE		
	KOPFHOERERBUCHSE		
	PRESA JACK		
	TOMA JACK		
BK003	CINCH SOCKET 3 ASSY		21296150
	ENSEMBLE 3 PRISES CINCH		
	CHINCH 3 BUCHSEN-EINHEIT		
	ASSIEME 3 PRESA CINCH		
	CONJUNTO 3 TOMA CINCH		
BQ112	HEADPHONE SOCKET		21117680
	PRISE CASQUE		
	KOPFHOERERBUCHSE		
	PRESA JACK		
	TOMA JACK		
BR001	CABLE FLAT 8 PINS 400MM	⚠	2120041A
	CABLE NAPPE 8 PINS 400MM		
	KABEL FLACH 8 PINS 400MM		
	CAVO FALDA 8 PINS 400MM		
	CABLE 8 PINS 400MM		
BS003	CONNECTOR		11095570
	CONNECTEUR		
	STECKVERBINDUNG		
	CONNETTORE		
	CONECTOR		
BS004	CONNECTOR		70438840
	CONNECTEUR		
	STECKVERBINDUNG		
	CONNETTORE		
	CONECTOR		
BU002	USB SOCKET		56056520
	PRISE USB		
	USB-BUCHSE		
	PRESA USB		
	TOMA USB		
BX010	SCART SOCKET (BLACK)		60068900
	PRISE PERITEL (NOIR)		
	EURO-AV-BUCHSE (SCHWARZ)		
	EUROPRESA NORMALIZZATA (NERA)		
	EUROCONECTOR (NEGRA)		
BX100	CONNECTOR 21 PINS	⚠	21219710
	CONNECTEUR 21 VOIES		
	VERBINDEREL 21-POLIG		
	CONNETTORE 21 SPINOTTI		
	CONECTOR 21 PUNTOS		
CH200	ON/OFF SWITCH MSB2000	⚠	10276500
	CONTACTEUR MARCHE/ARRET MSB2000		
	EIN-AUS SCHALTER MSB2000		
	CONTATTORE ACCESO/ SPENTO MSB2000		
	CONTACTOR MARCHA/PARADA MSB2000		
CH201	CABLE WITH CONNECTOR 2 PINS 500MM		25419710
	CABLE AVEC CONNECTEUR 2 VOIES 500MM		
	KABEL MIT VERBINDER 2 PINS 500MM		
	CAVO CON CONNETTORE 2 SPINOTTI 500MM		
	CABLE CON CONECTOR 2 PUNTOS 500MM		
FP001	1A6T 250V TIME-LAG FUSE	⚠	48064700
	1A6T 250V FUSIBLE TEMPORISE		
	1A6T 250V SICHERUNG		
	1A6T 250V FUSIBILE TEMPORIZZATO		
	1A6T 250V FUSIBLE TEMPORIZADO		
NH001	CTF5560 UHF/VHF TUNER		21383640
	CTF5560 TETE UHF/VHF		
	CTF5560 UHF/VHF TUNER		
	CTF5560 TUNER UHF/VHF		
	CTF5560 SINTONIZADOR UHF/VHF		
SK101,102,103, 104,105,106, 107,108	MICROSWITCH MICRO CONTACTEUR MIKROSCHALTER MICROINTERRUTTORE MICROCONTACTOR		25380930
SP001	RELAY 12V	⚠	20620640
	RELAIS 12V		
	RELAIS 12V		
	RELE 12V		
	RELE 12V		

EQUIPMENT/PRESENTATION
EQUIPEMENT/PRESENTATION
AUSSTATTUNG/GEHAEUSE
PARTI VARIE
EQUIPO/PRESENTACION

FITTING SET		25820690
ENSEMBLE DE CALES		
POLSTER KIT		
ASSIEME DISTANZIATORE		
CONJUNTO CALZO		
LOGO THOMSON CHROME		25657790
LOGO THOMSON CHROME		
SCHRIFTZUG THOMSON CHROME		
MARCHIO THOMSON CHROME		
LOGOTIPO THOMSON CHROME		
CARTON MIDDLE		25796600
CARTON INTERMEDIAIRE		
KARTON MITTELTEIL		
CARTONE MEZZO		
CARTON MEDIO		
FOLDING BOX		25820710
EMBALLAGE CARTON		
KARTON		
IMBALLAGGIO CARTONE		
EMBALAJE CARTON		
FRONT PANEL BS04TH		3598832A
FACADE BS04TH		
FRONTPLATTE BS04TH		
PANNELLO FRONTALE BS04TH		
PANEL FRONTAL BS04TH		

MICROPROCESSOR - TDA9554

SOUND TRAP

TUNER AGC

DEEMPHASIS · (AM.) · AUD EXT · AUD OUT · RESET · VPE · LED OUT (2X) · BCL · SDA · YBT OUT · ADC IN (42) · I/O PORTS (42) · +3.3V

27 AGC · 38 IF VIO OUT · 28 · 35 · 44 · 57 · 58 · 59 · 2 · 3 · 5/8 · 10/11 · 54 · 56 · 61

23 · IF IN · 24

VISION IF ALIGNMENT-FREE PLL DEMOD AGC/AFC VIDEO AMP

OSS SOUND IF AGC/OSS MIXER AM DEMODULATOR AUDIO SWITCH VOLUME CONTROL

ENHANCED 80C51 CPU

I²C-BUS TRANSCEIVER VST PWM-DAC I/O PORTS

10 PAGE MEMORY

REF · 40 · 42 · EXT_CVBS IN · EXT_CHROMA_IN · 43

VIDEO SWITCH VIDEO IDENT. VIDEO FILTERS

LUMA DELAY PEAKING BLACK STRETCH

ROM / RAM

TELETEX ACQUISITION

TELETEX/OSD DISPLAY

CVBS · SYNC

CDR · R · G · B · BL

PAL/SECAM/ NTSC DECODER

BASE-BAND DELAY LINE

CONTR./BRIGHT. OSD/TEXT INSERT CCC WHITE-P.ADJ.

51 RO
52 GO
53 BO
49 BCL IN
50 I_CUTOFF

BCL

9 · 12 · 30 · +8V · VCC TV proc. · +8V

H/V SYNC SEP. H-OSC. + PLL

H-DRIVE 2ⁿᵈ LOOP H-SHIFT

V-DRIVE + GEOMETRY

EW GEOMETRY

RGB/YUV INSERT RGB/YUV MATRIX SATURATION YUV/RGB MATRIX

H · V · Y · U · V · R · G · B

18 P12_FIL · 17 P11_FIL · 34 LFB IN · 33 H OUT · 25 · 21 · 22 · 36 EHTO · 46 · 47 · 48 · 45

H-DRIVE B · H-DRIVE A · RV004 · V-DRIVE B · V-DRIVE A · EHT-COMP · R IN · G IN · S IN · BU

MSP3415G - SOUND PROCESSOR

Sound IF1 — 47 — ADC — De-modulator — Pre-processing — Loud-speaker Sound Processing — DAC — 24 / 25 — Loudspeaker

MSP34X5G

I²S1 — 12
I²S2 — 18 — Prescale — Source Select — 11 — I²S

SCART1 — 41 / 42
SCART2 — 39 / 40

SCART DSP Input Select — ADC — Prescale — DAC — SCART Output Select — 30 / 31 — SCART1
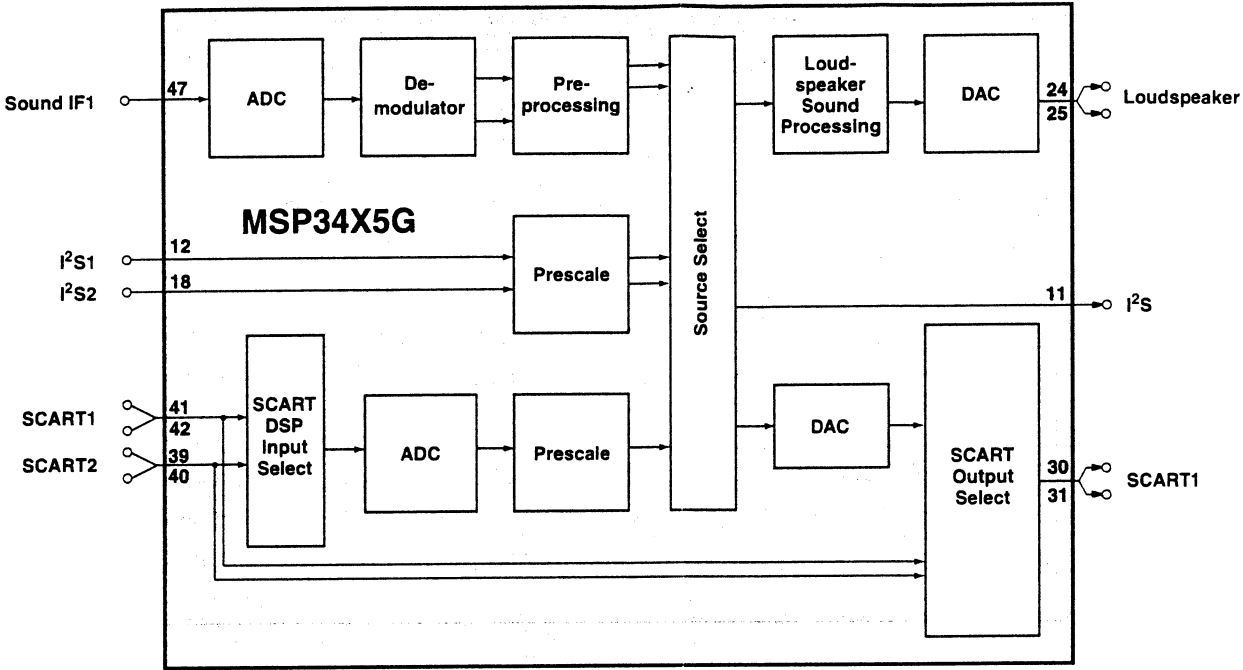
AUDIO POWER AMPLIFIER - TDA7253 - TDA7263

RFI 27k

2 IN- L
1 IN+ L
L — OUT L 10
3 SUR
MUTE
SC PROTECTION
REFERENCES
9 VCC
TURN-ON AND OFF
TJ
TH PROTECTION
5 IN+ R
4 IN- R
R — OUT R 8
RFI 27k
6
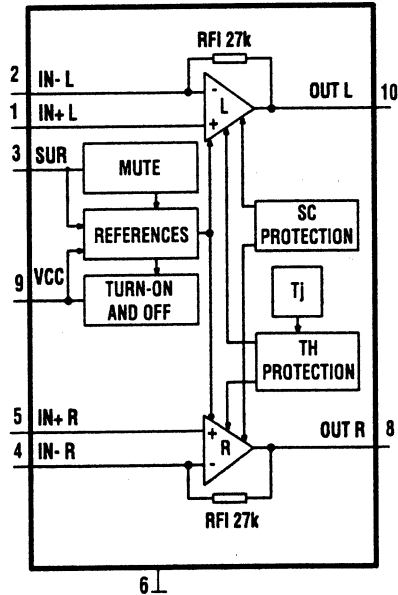
STV8130 - 3.3V AND ADJUSTABLE VOLTAGE REGULATOR

IN 1 — 1 · IN 2 — 2

REFERENCE — OUT 1 — 9 OUT 1

PROTECTION

RESET — 6 RESET — 3

DELAY CAPACITOR

DISABLE — 4 — DISABLE — OUT 2 — 8 OUT 2

5 · 7 PROGRAM
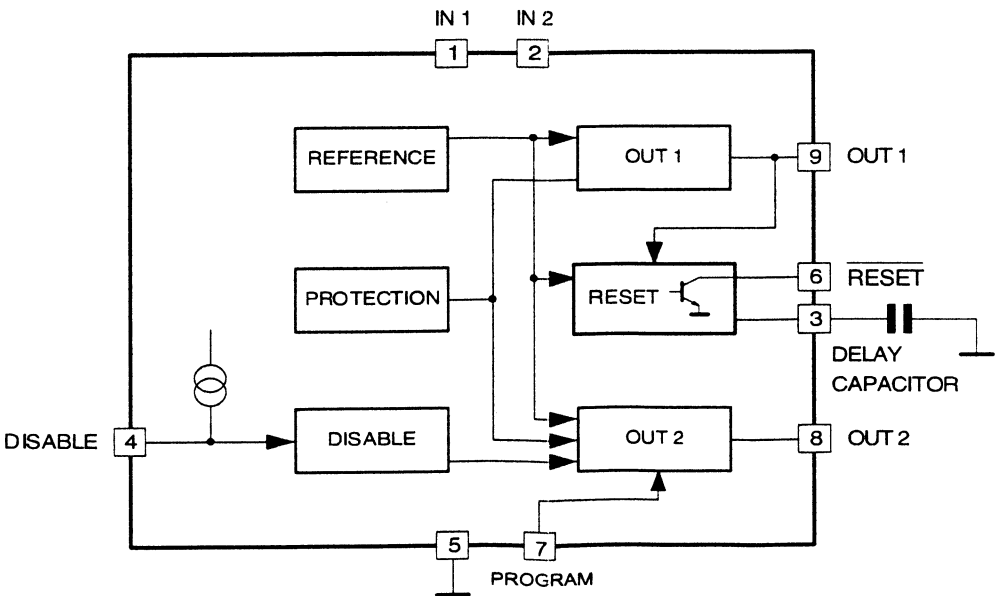
LIST OF ABBREVIATIONS - LISTE DES ABREVIATIONS - ABKÜRZUNGEN
LISTA DELLE ABBREVIAZIONI - LISTA DE ABREVIACIONES

- **AUDIO MUTE** MUTE AUDIO AMPLIFIER
- **BCL** BEAM CURRENT LIMITING INFORMATION
- **B** BLUE SIGNAL TO VIDEO AMPLIFIER
- **CVBS** COMPOSITE VIDEO BASE BAND SIGNAL
- **DEGAUSS** DEGAUSS SIGNAL
- **G** GREEN SIGNAL TO VIDEO AMPLIFIER
- **HDRIVE** DRIVE SIGNAL FOR HORIZONTAL DEFLECTION
- **HEATER** HEATER VOLTAGE
- **I_CUT** CUT OFF CURRENT
- **IR** DATA FROM INFRARED RECEIVER
- **LFB** HORIZONTAL FLYBACK REFERENCE
- **PO** POWER ON. SIGNAL FROM MICRO. TO POWER SUPPLY. SWITCHES THE POWER SUPPLY FROM STANDBY TO ON.
- **R** RED SIGNAL TO VIDEO AMPLIFIER
- **SCL** SERIAL CLOCK
- **SDA** SERIAL DATA
- **UA** POSITIVE AUDIO VOLTAGE
- **UB1 / USYS** SYSTEM VOLTAGE
- **U_SYS_MOD** SIGNAL TO MODULATE USYS
- **UVIDEO** VIDEO VOLTAGE FOR THE CRT BOARD
- **V _DRIVE** DRIVE SIGNAL FOR VERTICAL DEFLECTION
- **+VSUPPLY** POSITIVE SUPPLY VOLTAGE FOR VERTICAL POWER AMPLIFIER
- **-VSUPPLY** NEGATIVE SUPPLY VOLTAGE FOR VERTICAL POWER AMPLIFIER
- **V12** SUPPLY VOLTAGE FROM POWER SUPPLY. USED FOR THE DRIVER CIRCUIT START UP
- **+3V3UP** POSITIVE SUPPLY FOR GESTION PART IV001
- **+33V** TUNER VOLTAGE

Data processing

Symptom description

The set switch OFF and switch ON again without reason.
Colour flashing on the screen.

THOMSON

SCART INTERFACE - INTERFACE PERITELEVISION - SCART INTERFACE - PRESA PERITEL- EUROCONECTOR

SCI A (EU) ITC008

ITC008
First issue 04 / 03
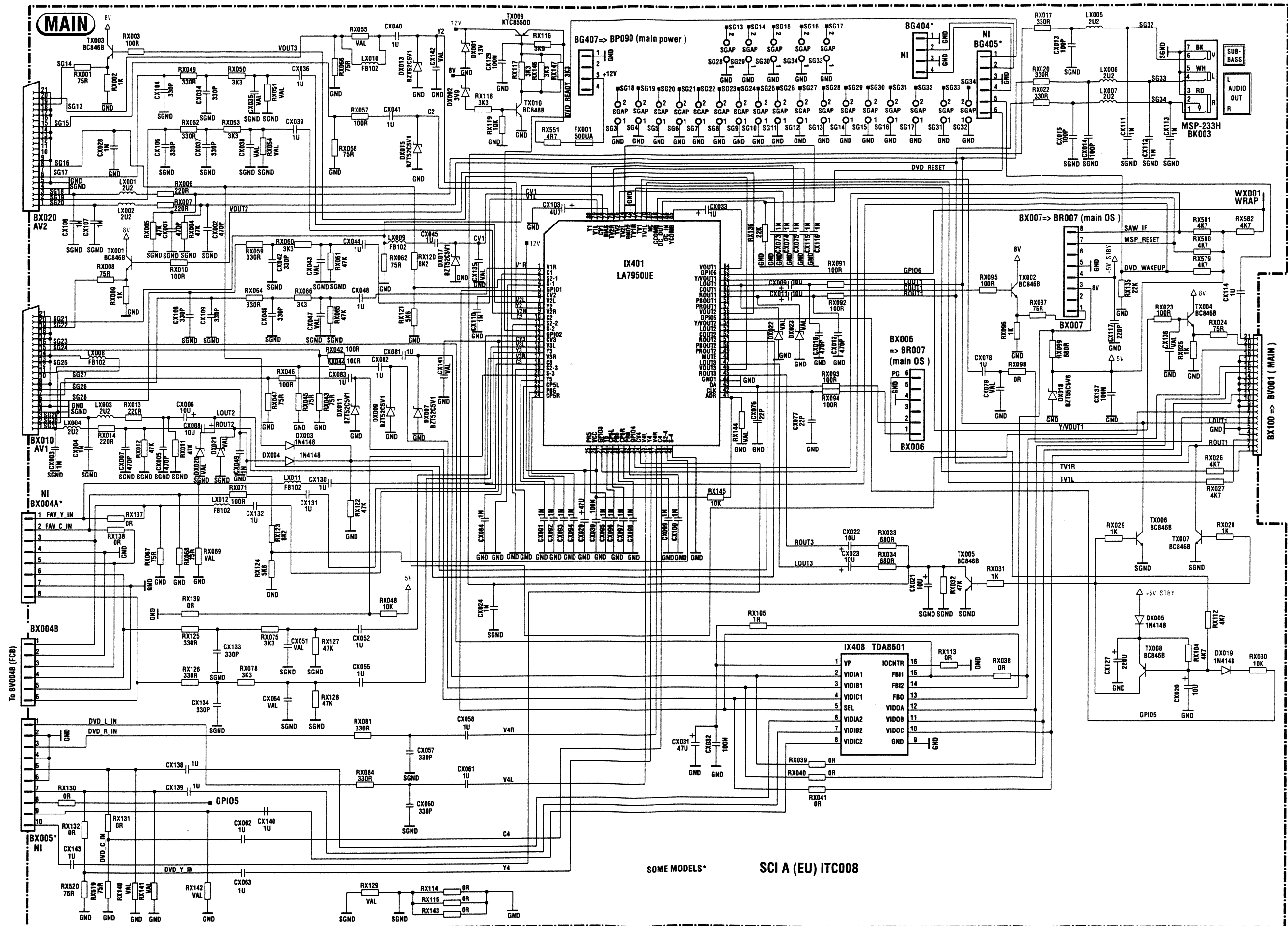
SCART INTERFACE - INTERFACE PERITELEVISION - SCART INTERFACE - PRESA PERITEL- EUROCONECTOR

COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES
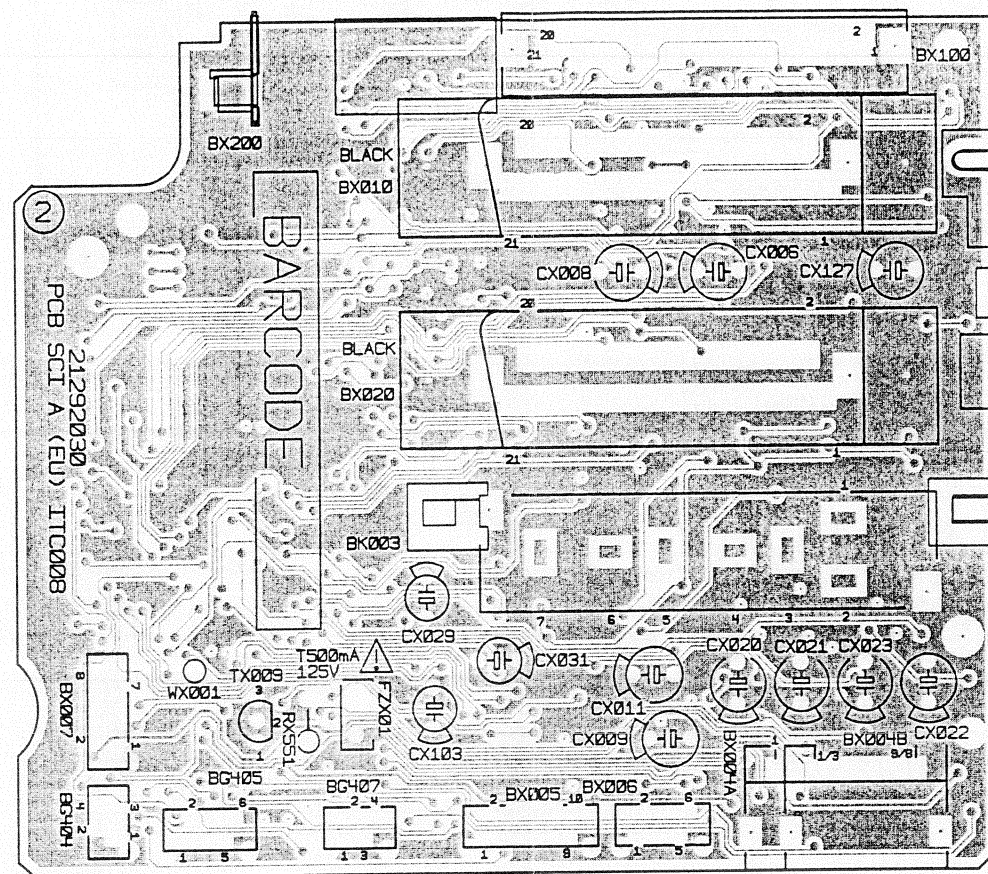
SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS
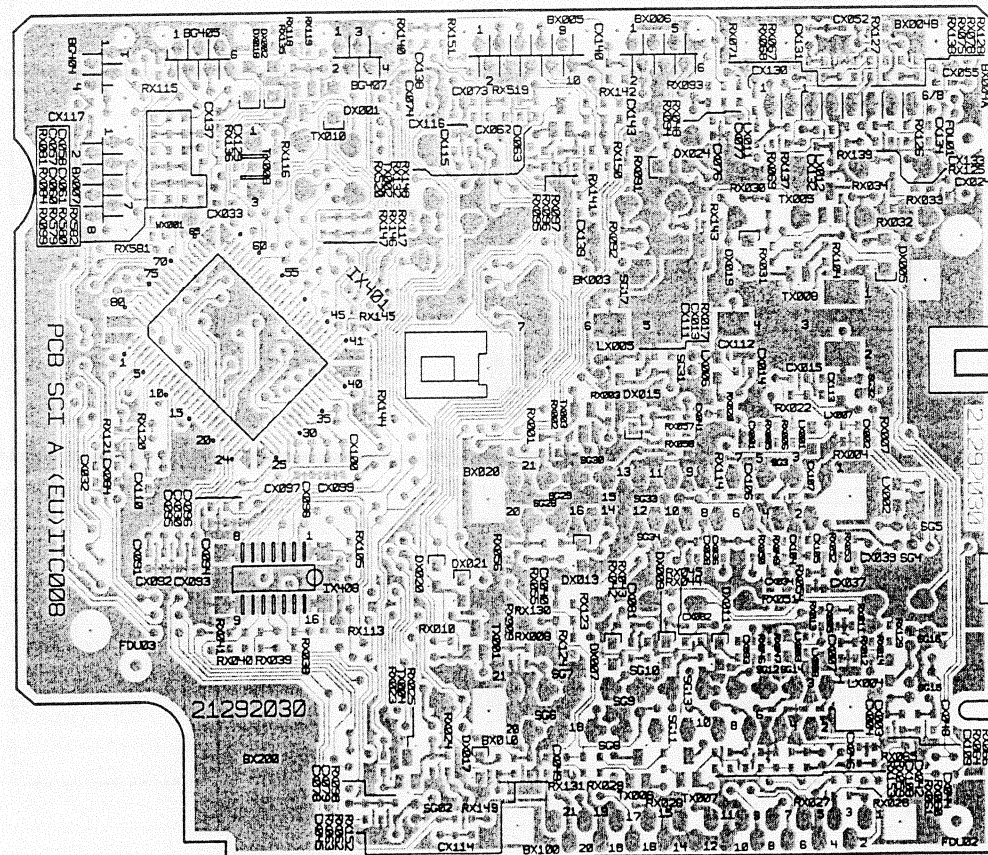
INTEGRATED CIRCUITS AND TRANSISTORS OUTLINE - CIRCUITS INTEGRES ET TRANSISTORS INTEGRIERTE SCHALTUNGEN UND TRANSISTOREN - CIRCUITI INTEGRATI TRANSISTOR CIRCUITOS INTEGRADOS Y TRANSISTORES

MSP3415G

TDA9554PS
TDA9567

LA79500E

CAT24WC08P

TDA7263

TDA 8177

STV8130

TDA6107JF
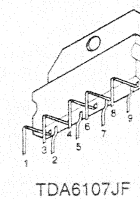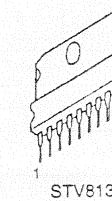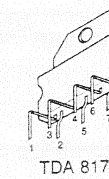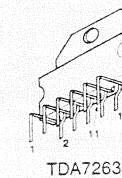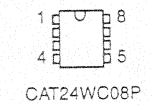
BC846 B
BC848B
BC856 B
BC858B
BCR141
BCR185
BCR191
DTC144EK
RN1402
RN2402
RN1409
RN2417

BC 337-40
BC548B
BC558B

KTC8550D
S1423

TL431
1: REFERENCE
2: ANODE
3:CATHODE

2SK2717

MC7805/ACT

S2055N
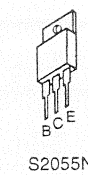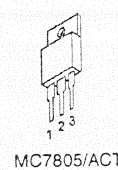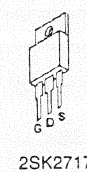
VIDEO AMPLIFIER BOARD - PLATINE AMPLIFICATEURS VIDEO - VIDEOVERSTÄRKERPLATTE - PIASTRA AMPLIFICATORE VIDEO - PLATINA AMPLIFICADOR VIDEO

SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS

CRT

* Mini

ITC008
First issue 04/ 03

IH01
TMM_2000

NOTE:-

FULLY BIASED MOSFET		SEMI BIASED MOSFET	
TH01	S595TR		BF1101R
TH20	S595TR		BF1101R
TH40	S594TR		BF904R
RH91	DELETE		27K
RH92	DELETE		33K
RH93	DELETE		33K

** NOTE:

	TP01
CTF 5510A	RH65=OPEN
CTF 5511	RH65=0 OHM
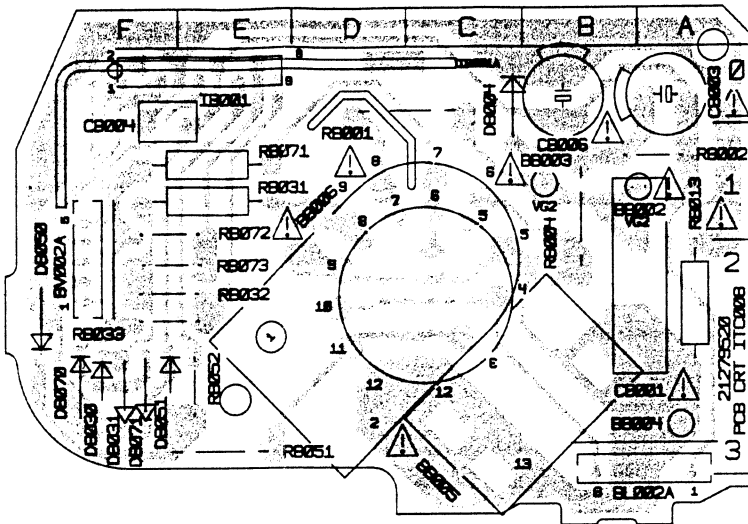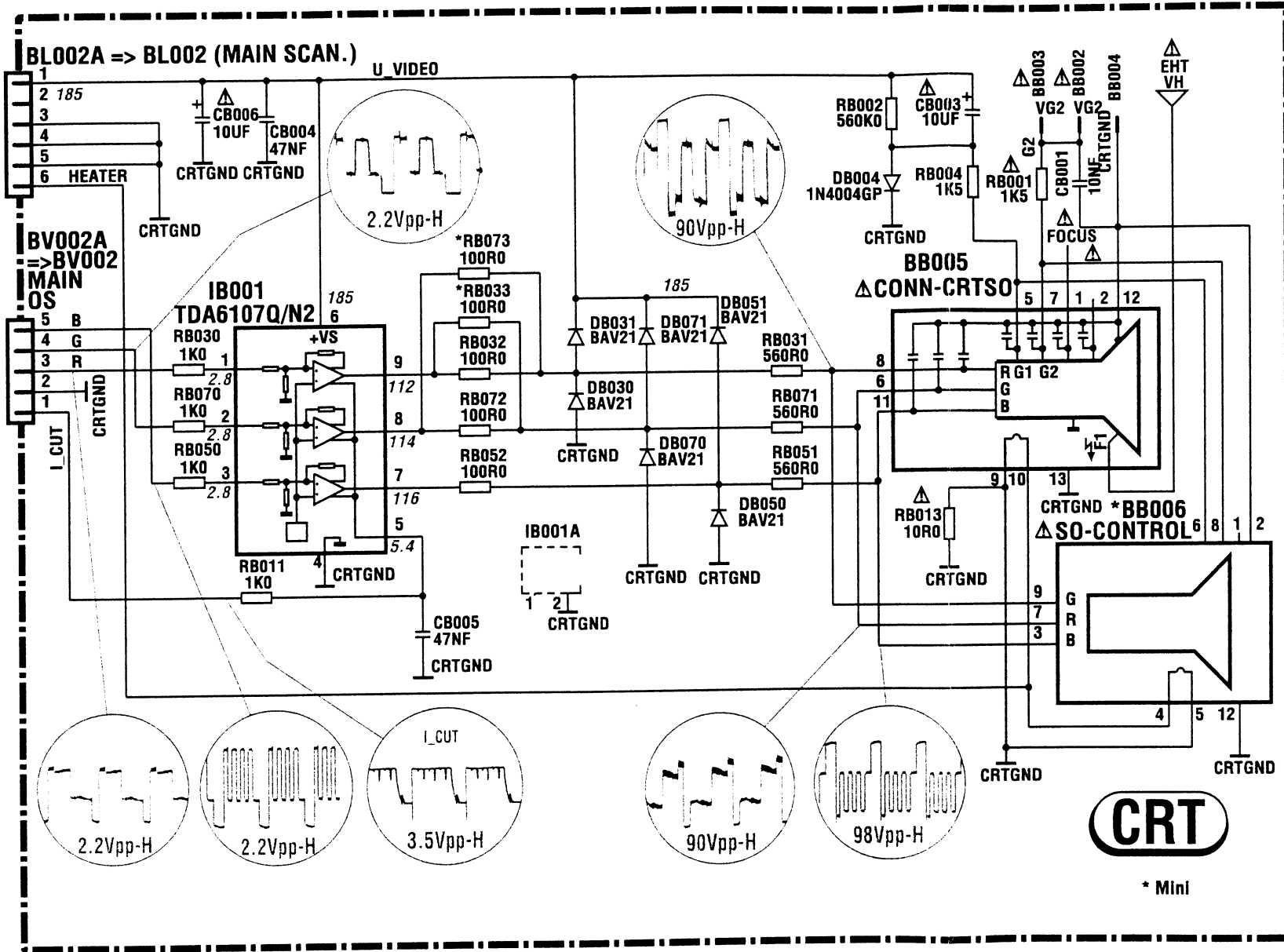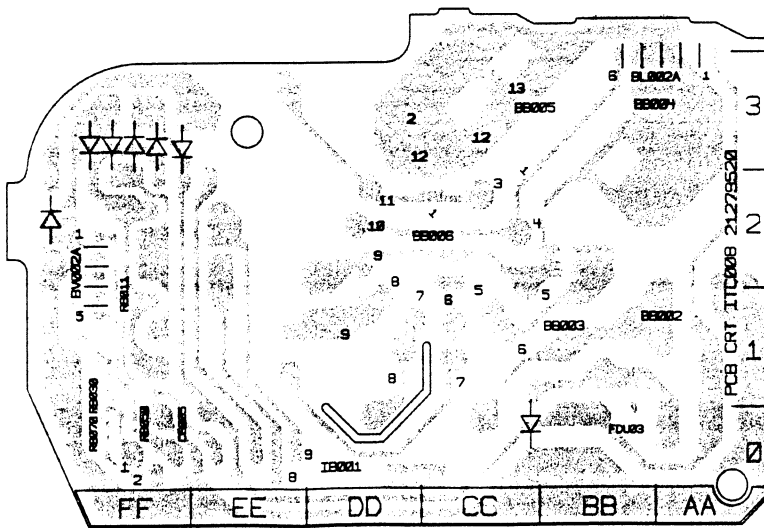
Pin labels: AGC (1), TU (2), AS (3), SCL (4), SDA (5), UB (6), +5V (7), +33V (9), IF2 (10), IF1 (11), BH01

COMPONENTS LOCATION - LOCALISATION DES ELEMENTS - LAGE DER BAUTEILE
LOCALIZZAZIONE DEGLI ELEMENTI - LOCALIZACION DE LOS COMPONENTES

* SOLDER SIDE - COTE CUIVRE - LÖTSEITE - LATO SALDATURE - LADO DEL COBRE

```
| 1 | 2 | 3 |
```

Comp	*	Loc
BF001	*	UU11
BF002A		S13
BF002B		R13
BH001	*	XX1
BH002		W1
BH002	*	WW1
BJ005		D5
BJ005	*	DD5
BJ006		D6
BJ006	*	DD6
BL001		U11
BL002		S12
BL002	*	XX11
BL002	*	SS12
BL003		T16
BL003	*	TT15
BL003A		T16
BL003B		T15
BL003C		T15
BL004		U15
BL004	*	TT15
BL005		R14
BL005	*	RR13
BL005A		R13
BL005B		R13
BL006		S3
BL006	*	SS3
BL007		V12
BL007	*	VV12
BL008		W10
BL008	*	WW10
BL009		W10
BL009	*	WW10
BP001		J13
BP001	*	HH13
BP0013A	*	HH13
BP0013B	*	HH13
BP001A		H13
BP001B		H13
BP002		G11
BP002	*	HH10
BP002A		G10
BP002B		G10
BP003		G14
BP003	*	HH14
BP006A		P7
BP006A	*	PP7
BP006B		P7
BP006B	*	PP7
BP006C		M7
BP006C	*	MM7
BP006D		P12
BP006E		P11
BP007		H8
BP007	*	HH8
BP007A		H8
BP007B		H8
BP007C		G8
BP008		H12
BP008	*	HH11
BP008A		H12
BP008B		H11
BP011		E9
BP011	*	EE10
BP011A		E10
BP011B		E10
BP012		F13
BP012	*	FF12
BP012A		F12
BP012B		F12
BP013A		H13
BP013B		H13
BP015		N14
BP015B		L14
BP016A		F11
BP016B		F11
BP020		H15
BP020	*	HH15
BP090		P6
BP090	*	PP6
BP091		N6
BP099		Q12
BP099	*	QQ12
BR001		F7
BR001	*	EE7
BR002		XX8
BR003		R7
BR003	*	RR7
BR004		Q0
BR004	*	T0
BR005		T0
BR005	*	TT0
BR006		S0
BR006	*	SS0
BR007		V3
BR007	*	VV3
BR008		E6
BR009		F8

Comp	*	Loc
BR009	*	FF7
BR010		P1
BR010	*	NN1
BR016		S0
BR016	*	SS0
BR017		V3
BS002		H0
BS002	*	HH1
BS003		G3
BS004		G2
BS004	*	HH2
BS005	*	XX1
BS006	*	WW0
BS008		E4
BS008	*	DD4
BS009		M3
BS009	*	MM3
BV001		W7
BV001	*	XX5
BV002		R7
BV002	*	RR7
BV004		F6
BV004	*	FF6
BV008	*	EE6
BZ01	*	XX15
CF003		R8
CF005		R9
CF008		R11
CF009		R11
CF010		R9
CF101		Q9
CH001	*	UU1
CH003		W1
CH004	*	VV2
CH005	*	WW2
CH006	*	WW2
CH010	*	UU2
CH011	*	WW2
CI010		TT1
CI021		VV4
CI023		VV4
CI043		SS1
CI045		UU2
CI050		TT4
CI054		U4
CI055	*	TT4
CI0587	*	RR2
CI059	*	UU3
CI060	*	VV3
CI061	*	TT4
CI062		T3
CI063	*	TT4
CI064	*	TT4
CI070	*	SS7
CI071		S6
CI072		T8
CI073	*	TT8
CI075	*	TT5
CI075	*	UU7
CI080	*	WW7
CI081	*	WW7
CJ020	*	DD6
CJ020	*	EE7
CK012		E8
CL005		U9
CL005	*	VV9
CL010		V12
CL011		V11
CL012		V10
CL021		S16
CL022		U12
CL023		R14
CL024		R16
CL025		Q14
CL026		R13
CL027		S15
CL030	*	UU10
CL033	*	SS12
CL034	*	TT11
CL035		T8
CL036	*	SS12
CL040		W12
CL041		W11
CL054	*	VV14
CL060		T11
CL061	*	WW12
CL28		S14
CP001		F14
CP002		F11
CP004		J9
CP005		J10
CP006		J8
CP008		M9
CP009		L11
CP012		G10
CP015		M14

Comp	*	Loc
CP018		H16
CP022		K14
CP024		J11
CP025		J11
CP026		K12
CP032		M7
CP033		K13
CP034		N7
CP035		L7
CP036		L7
CP037		J12
CP038		H13
CP039		J13
CP040		J15
CP050		L16
CP053		P16
CP060		P11
CP062		Q10
CP063		N8
CP064		N7
CP066		J7
CP068		P10
CP080		P15
CP082		P13
CP088		P13
CP093		Q9
CP094		P7
CP097		L6
CP123	*	KK12
CP131	*	MM7
CP166	*	LL7
CP198	*	HH7
CR001	*	PP1
CR002	*	PP1
CR003	*	PP1
CR004	*	PP4
CR005		P3
CR006	*	QQ4
CR007	*	QQ4
CR008	*	QQ4
CR009		N1
CR010	*	QQ5
CR012	*	RR3
CR013	*	XX4
CR014	*	XX4
CR022	*	WW7
CR024	*	WW8
CR033	*	QQ4
CR057	*	UU7
CR071		V0
CR074	*	SS7
CS001	*	WW0
CS002	*	WW0
CS003		DD4
CS003	*	DD5
CS005		F4
CS006	*	EE5
CS007	*	EE5
CS009		F4
CS101		U4
CS102	*	VV3
CS104		M4
CS105	*	VV4
CS106	*	LL4
CS107		J5
CS108	*	LL4
CS109		L4
CS110		L4
CS111	*	LL4
CS112		K5
CS113	*	KK3
CS114		K4
CS115	*	KK3
CS116	*	WW4
CS117		J6
CS118	*	VV4
CS119	*	KK3
CS120		K5
CS121	*	JJ4
CS123	*	GG4
CS124		GG4
CS125	*	GG5
CS126		GG4
CS127	*	HH4
CS128		H5
CS129	*	JJ4
CS130	*	MM3
CS130		HH4
CS131		JJ4
CS132	*	JJ4
CS133		HH4
CS134	*	LL3
CS135		M2
CS136		L2
CS137	*	LL3
CS138		LL3
CS139	*	KK3
CS140		U4
CS141	*	UU5
CS146	*	JJ3

Comp	*	Loc
CS147	*	JJ3
CS148		F5
CS151	*	KK3
CS152	*	KK3
CS201		J2
CS202		J0
CS203		L2
CS204		M0
CS205	*	LL0
CS206		H3
CS207		K2
CS208	*	HH1
CS209		EE4
CS210	*	HH0
CS211		H1
CS212	*	HH1
CS214		K2
CS215	*	GG3
CS216		G4
CS217	*	JJ0
CS415		K3
CV001	*	RR4
CV002		R3
CV003	*	RR4
CV004	*	RR4
CV005		RR4
CV006	*	RR3
CV007		SS4
CV008		SS4
CV009		SS4
CV010	*	SS4
CV011	*	SS3
CV012	*	SS4
CV013		S3
CV014	*	QQ4
CV015	*	QQ4
CV018		R6
CV019		RR4
CV020		RR6
CV021		RR6
CV022		RR6
CV023		RR5
CV024	*	SS5
CV025		SS5
CV027	*	SS5
CV029		SS4
CV030		T5
CV033	*	UU5
CV035	*	RR6
CV036		WW4
CV040		WW7
CV041		WW6
CV042		WW5
CV043		WW5
CV044		WW5
CV045		Q7
CV046	*	QQ6
CV051		XX4
CV052		XX4
CV070	*	TT4
CV071	*	TT5
CV072		S7
CV076	*	SS4
CV108	*	SS4
CV113	*	SS3
CZ03	*	VV15

[diode symbol]

DF001		S10
DF002		S10
DF003		S10
DF010		S8
DF101	*	RR10
DF102	*	SS9
DH001		U7
DH002	*	UU1
DI030	*	SS2
DI040	*	UU3
DJ020		E7
DL004		V10
DL004	*	QQ11
DL005		V9
DL010		V11
DL011	*	V10
DL012		V10
DL013		V10
DL014		V9
DL015		W9
DL021		S14
DL024		T14
DL025		Q15
DL030		T10
DL035		S8
DL060		U10
DL062		U11
DL072	*	VV9
DP001	*	KK7

Comp	*	Loc
DP002		H10
DP003		J10
DP004		J9
DP005		J8
DP023		K12
DP025		K11
DP026		K12
DP027		L10
DP028		K10
DP030		K15
DP033		K14
DP036		K7
DP037		H11
DP040		K13
DP057		P15
DP061		P11
DP063		N8
DP071		F6
DP080		P14
DP093		P8
DP095		K5
DP097		N6
DP099		H6
DR001		N3
DR002	*	PP1
DR011		V1
DR011	*	QQ4
DR012		U1
DR013		P4
DR014	*	WW6
DR015	*	WW6
DR016		W4
DR017		W4
DR018		W4
DR020		W4
DR021		W3
DR021	*	XX8
DR022		W3
DR023		W3
DR024		W3
DS003	*	HH3
DS101		N1
DS201		H6
DS202		G6
DS203	*	LL4
DS204		MM0
DS206	*	QQ4
DV001		R8
DV070	*	VV8
DV073		W5
DZ01	*	WW15
DZ03		W15
DZ05		W9

[inductor symbol]

FDU02	*	XX0
FI010		S3
FI010	*	SS2
FI020	*	TT3
FI030		T1
FI050		T0
FI050	*	WW8
FI051		W8

[component symbol: P]

FI0520		U3
FP001	*	HH14
FP001A		J15
FP001B		H14
FP003		H11
FP003	*	HH10
FZP30		M6
FZP60		P12
FZP66		K6
FZP93		P9

[arrows symbol]

GE001		D7
GK001		D9
GR082	*	WW7

[component box]

IF001		R10
IF001	*	RR10
IP001	*	LL15
IP030		L7
IP030		LL8
IP030A		K7
IP031		J6

Comp	*	Loc
IP031	*	JJ7
IP050		L16
IP050	*	MM16
IR001		Q1
IR001	*	PP1
IS100		H3
IS100	*	HH3
IS200		K0
IS200	*	J0
IS200A		M1
IV001		U4
IV001	*	SS4

[connector symbol o—o]

JE001	*	DD8
JF002		S8
JF005		Q8
JF009	*	SS8
JF012		R11
JF910	*	SS9
JH001		S1
JH002		W1
JH003		W1
JH004	*	VV2
JH006		S1
JH009		T2
JH010		V3
JH011		N0
JI013		U6
JI0180	*	TT2
JI100		V8
JI101		UU5
JI110		V7
JI130		T6
JI140		U7
JI150	*	TT7
JI160		V7
JI170		T2
JI922	*	WW2
JI923		UU4
JI950		TT3
JJ01		E5
JK001		DD9
JK501		E7
JL003		V9
JL006		U9
JL052		W9
JL055		U15
JL901		T10
JL902		T14
JL903		T13
JL906		U9
JL907		U9
JL908		V15
JL921		T15
JL990		T13
JL991		T14
JL992		T14
JL994		T9
JL995	*	UU10
JP001		G15
JP002		G15
JP003		H10
JP004		F9
JP005		F15
JP006		G8
JP007		H8
JP009		F9
JP010		F16
JP011		F16
JP012		G16
JP013		G9
JP014		E9
JP017		L9
JP019		K13
JP020		K14
JP028		Q9
JP029		J14
JP032		J14
JP034		J6
JP035		G6
JP036		L16
JP050		P10
JP051		N10
JP052		N10
JP053		N10
JP054		N10
JP055		M8
JP056		M8
JP057		M8
JP058		N14
JP059		P8
JP060		Q9
JP061		M5
JP065		Q14
JP066		Q15

Comp	*	Loc
JP067		N6
JP068		M5
JP069		M7
JP070		E14
JP071		E13
JP072		E14
JP073		E13
JP074		N4
JP075		Q7
JP076		M5
JP082		P6
JP085		P8
JP121	*	JJ11
JP162	*	NN6
JP163		N6
JP164	*	MM7
JP185	*	NN6
JR001		U0
JR003		Q7
JR004		N5
JR005		V6
JR006		P0
JR007		S0
JR008		R7
JR009		S5
JR010	*	VV2
JR012		R1
JR012		P0
JR013		Q7
JR014		N5
JR015		Q1
JR016		M6
JR017		P3
JR018		N2
JR019		P3
JR020		N2
JR021	*	J5
JR022		F2
JR023		P2
JR024		Q3
JR025	*	FF7
JR026	*	PP3
JR027		Q1
JR028	*	PP3
JR029		S7
JR030		R1
JR031		V3
JR032	*	PP2
JR034		QQ1
JR036	*	PP0
JR037		QQ1
JR038		QQ1
JR040		Q1
JR041		P3
JR042		Q1
JR047		N1
JR048	*	TT1
JR084		Q3
JR090		TT4
JS009		N0
JS010		K0
JS014		L3
JS033		L5
JS034		L5
JS037		H6
JS039		N3
JS040		N3
JS041		U6
JS042		V5
JS043		F5
JS044		N4
JS045		N4
JS047		V6
JS048		N3
JS049		U6
JS052		U6
JS055		V5
JS057		V5
JS058		N4
JS060		K1
JS070		U6
JS101		E4
JS102		J1
JS103		J1
JS105		M6
JS108		F5
JS109		P0
JS110		G6
JS501		WW4
JS502		WW4
JS503		EE5
JS504		HH4
JS505		LL2
JS506		JJ3
JS507		QQ1
JS508		QQ1
JS509		KK4
JS510		KK4
JS511		UU5
JS512		MM1
JS514		EE4

Comp	*	Loc
JS515	*	HH2
JS516	*	HH1
JS517		KK0
JS518		EE4
JS519	*	FF4
JS520		GG3
JS521		LL2
JS522		FF6
JS523		LL3
JS524		LL4
JS525		KK4
JS526		KK3
JS527		LL2
JS528		LL1
JS530		GG3
JS531		KK3
JS532		KK2
JS533		VV3
JS534		VV3
JS535		NN3
JV001		T8
JV002		T3
JV003	*	XX6
JV004		T2
JV005		XX7
JV006	*	TT4
JV007		V6
JV008		U5
JV009		VV6
JV010	*	RR7
JV011	*	RR2
JV072		T8
LH010		V0
LI010	*	TT2
LI022		W7
LI030	*	TT1
LI031		T7
LI032		T8
LI074	*	TT8
LL005		U16
LL026		Q12
LL026	*	QQ12
LL032		T12
LL032	*	TT11
LL033		T12
LL033		S12
LL033	*	TT11
LL05	*	VV13
LP002		F13
LP002	*	GG13
LP003	*	MM11
LP003A		N10
LP020		L13
LP025		J12
LP081		N14
LR001		Q6
LR002		P5
LR010	*	QQ6
LS101		W3
LS102		U3
LS103		N4
LS105		N4
LS106		G5
LS107		G5
LS108		J2
LS205		HH5
LS206		GG5
LS207		GG5
LS208		JJ3
LV001		R2
LV002		Q6
LV003		Q6
LV004		T6
LV020	*	QQ6
LV030		Q6
NH001	*	XX2

[component symbol]

QS101		H4
QS101	*	JJ4
QV001		Q5
QV001	*	RR5

[component symbol]

RB008	*	RR8
RD114	*	M0
RF002	*	RR10
RF004		R11
RF006		R11
RF008		R11
RF009		S11
RF101	*	QQ10

Comp	*	Loc
RF102	*	TT9
RH002	*	VV2
RH003	*	WW2
RH004	*	WW2
RH005	*	WW2
RH006	*	WW1
RH010	*	VV2
RI004		UU3
RI007		TT2
RI021		VV4
RI031		SS1
RI032		SS1
RI033		SS2
RI040		UU3
RI041		UU3
RI042		TT3
RI050		T1
RI051		TT4
RI059		UU2
RI060		UU3
RI061		VV3
RI070		TT5
RI071		TT6
RI072		TT7
RI073		TT7
RI074		TT6
RI075		TT7
RI076		WW6
RI077		W6
RI078		TT8
RI079		TT7
RI080		M2
RI081		WW8
RI082		WW8
RI083		WW8
RI084		WW7
RI085		VV8
RI086		VV8
RI087		WW8
RI087		WW8
RI095		U6
RJ002		EE6
RJ004		DD6
RK001		DD12
RK002		DD12
RK003		DD11
RK004		DD10
RK005		EE15
RK006		EE12
RK016		DD9
RL001		U9
RL002		U16
RL003	*	VV14
RL004		U9
RL005	*	VV9
RL006		UU11
RL009		VV11
RL010		U11
RL012		U11
RL015		UU9
RL018		VV11
RL019		VV11
RL025		R16
RL026		Q13
RL031		S10
RL032		TT10
RL033		S11
RL034		U11
RL035		TT12
RL036		TT10
RL037		S8
RL038		R8
RL040		W11
RL042		Q6
RL043		V7
RL044		V7
RL051		UU15
RL052		UU15
RL055		Q16
RL060		U9
RL061		XX12
RL062		XX13
RL063		WW13
RL068		WW13
RL54		UU11
RP001		K8
RP002	*	FF10
RP003	*	FF10
RP007		J9
RP015		G7
RP016		J16
RP019		K10

Comp	*	Loc
RP020		K11
RP021		K14
RP023		J11
RP026		J14
RP027		J11
RP029		J14
RP030		H11
RP031		K13
RP033		K14
RP037		H11
RP038		H12
RP040		K15
RP041		K16
RP052		N15
RP056		N16
RP057		Q16
RP065		N8
RP066		P7
RP068		P10
RP077		F6
RP078		G7
RP091		L8
RP095		L6
RP125	*	KK12
RP132	*	JJ12
RP151	*	PP15
RP153	*	PP15
RP155	*	MM15
RP158	*	MM16
RP161	*	LL7
RP166	*	KK6
RP175	*	FF8
RP176	*	FF8
RP190	*	JJ7
RP192	*	JJ7
RP196	*	HH6
RP197	*	HH7
RP199	*	PP3
RR001	*	QQ1
RR002	*	PP1
RR003	*	PP2
RR005	*	QQ4
RR006	*	PP3
RR007	*	QQ5
RR008	*	PP5
RR009	*	QQ5
RR010	*	QQ4
RR012	*	QQ3
RR013	*	QQ3
RR014	*	RR3
RR015	*	RR3
RR016	*	R1
RR017	*	QQ3
RR018	*	QQ3
RR020	*	WW8
RR021	*	XX7
RR022	*	PP2
RR023	*	VV2
RR024	*	UU0
RR025		Q3
RR026		P5
RR027	*	QQ5
RR030		P7
RR043	*	VV1
RR044	*	VV1
RR049	*	XX7
RR052	*	NN3
RR060		QQ4
RR063		T1
RV002	*	QQ7
RV003	*	QQ7
RV004	*	SS4
RV006		R3
RV007	*	RR7
RV009		V5
RV010		R5
RV011		R5
RV013	*	RR5
RV016	*	RR5
RV017	*	RR5
RV019	*	SS6
RV022		P2
RV023	*	QQ7
RV025	*	SS6
RV039	*	WW6
RV040	*	XX6
RV041		W6
RV042	*	WW6
RV043		W6
RV044	*	WW5
RV045	*	XX6
RV046		W5
RV047		W5
RV048	*	WW4
RV049	*	WW5
RV051	*	XX5
RV052	*	WW4
RV055	*	WW5
RV060	*	SS6
RV062	*	UU4
RV065		R1
RV070	*	TT5
RV071	*	TT5
RV072	*	TT5
RV073		T6
RV076	*	SS6
RV077		T6
RV080		U1
RZ01	*	XX14
RZD16		W16
RZ03	*	XX15
RZ09	*	WW15
RZ11	*	VV15

[switch symbol]

SC218	*	KK0
SK001		D13
SK001	*	DD13
SK002		D12
SK003		D11
SK003	*	DD11
SK004		D10
SK005	*	DD10
SK005		D14
SK006		E15
SK006	*	DD15
SP001		F8
SP001	*	FF9
SP010		D15
SP010	*	FF15

[capacitor symbol]

[transistor symbol]

TF001A		T9
TI030		SS2
TI040		UU4
TI045		UU3
TI050		TT7
TI060		TT6
TI070		TT8
TI080		WW8
TL031		TT10
TL032		TT11
TL033		S10

Comp	*	Loc
RS203	*	LL1
RS204	*	LL1
RS205	*	LL1
RS206		MM1
RS207		KK2
RS209		MM0
RS210	*	JJ2
RS211		KK2
RS212	*	JJ2
RS214		L2
RS215	*	LL1
RS216		J0
RS217		KK1
RS218		KK1
RS219		H3
RS220	*	KK1
RS221	*	LL1
RS225		QQ4
RV001	*	RR3
RV002	*	QQ7
RV003	*	QQ7
RV004	*	SS4
RV006		R3
RV007	*	RR7
RV009		V5
RV010		R5
RV011		R5
RV012		R5
RV013	*	RR5
RV016	*	RR5
RV017	*	RR5
RV019	*	SS6
RV022		P2
RV023	*	WW7
RV025	*	SS6
RV039	*	WW6
RV040	*	XX6
RV041		W6
RV042	*	WW6
RV043		W6
RV044	*	WW5
RV045	*	XX6
RV046		W5
RV047		W5
RV048	*	WW4
RV049	*	WW5
RV051	*	XX5
RV052	*	WW4
RV055	*	WW5
RV060	*	SS6
RV062	*	UU4
RV065		R1
RV070	*	TT5
RV071	*	TT5
RV072	*	TT5
RV073		T6
RV076	*	SS6
RV077		T6
RV080		U1
RZ01	*	XX14
RZD16		W16
RZ03	*	XX15
RZ09	*	WW15
RZ11	*	VV15

[switch symbol]

SC218	*	KK0
SK001		D13
SK001	*	DD13
SK002		D12
SK003		D11
SK003	*	DD11
SK004		D10
SK005	*	DD10
SK005		D14
SK006		E15
SK006	*	DD15
SP001		F8
SP001	*	FF9
SP010		D15
SP010	*	FF15

[capacitor symbol]

[transistor symbol]

TF001A		T9
TI030		SS2
TI040		UU4
TI045		UU3
TI050		TT7
TI060		TT6
TI070		TT8
TI080		WW8
TL031		TT10
TL032		TT11
TL033		S10

Comp	*	Loc
TL033	*	SS11
TL035		S12
TL035	*	SS13
TL035A		S14
TL060	*	UU10
TL061	*	WW12
TL062	*	WW13
TP020		L14
TP020A		L12
TP020C		L13
TP022		K15
TP022	*	KK15
TP023		J13
TP023	*	JJ13
TP025		J11
TP025	*	JJ11
TP052		N16
TP052	*	NN15
TP171	*	FF6
TP175	*	FF6
TP176	*	FF7
TP177	*	GG7
TP192	*	HH7
TP193	*	HH7
TR001	*	PP3
TR002	*	QQ6
TR003	*	RR3
TR005		N4
TR005	*	PP4
TS101	*	HH4
TS102		UU4
TS103	*	VV5
TS201	*	JJ2
TS202	*	KK2
TS203	*	KK2
TS204		LL0
TZ01		V15
WP003A		J16
WP003A	*	HH16
XRP2		W15
ZP001		F11

ITC008

FRONT CONNECTOR BOARD - PRISES EN FACADE ET INTERCONNEXION DU CLAVIER -FRONT ANSCHLUSSPLATTE - PIASTRA CONNESSIONE FRONTALE - PLÁTINA MANDOS FRONTAL

**KEYBOARD - CIRCUITS DE COMMANDES - SCHALTBILD BEDIENTEIL - SCHEMA DEI CIRCUITI TASTIERA - ESQUEMA DE LOS CIRCUITOS MANDOS**
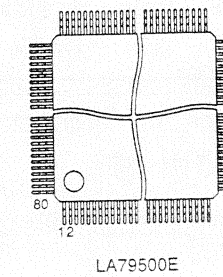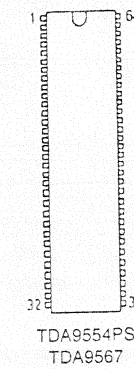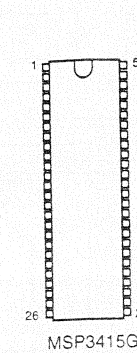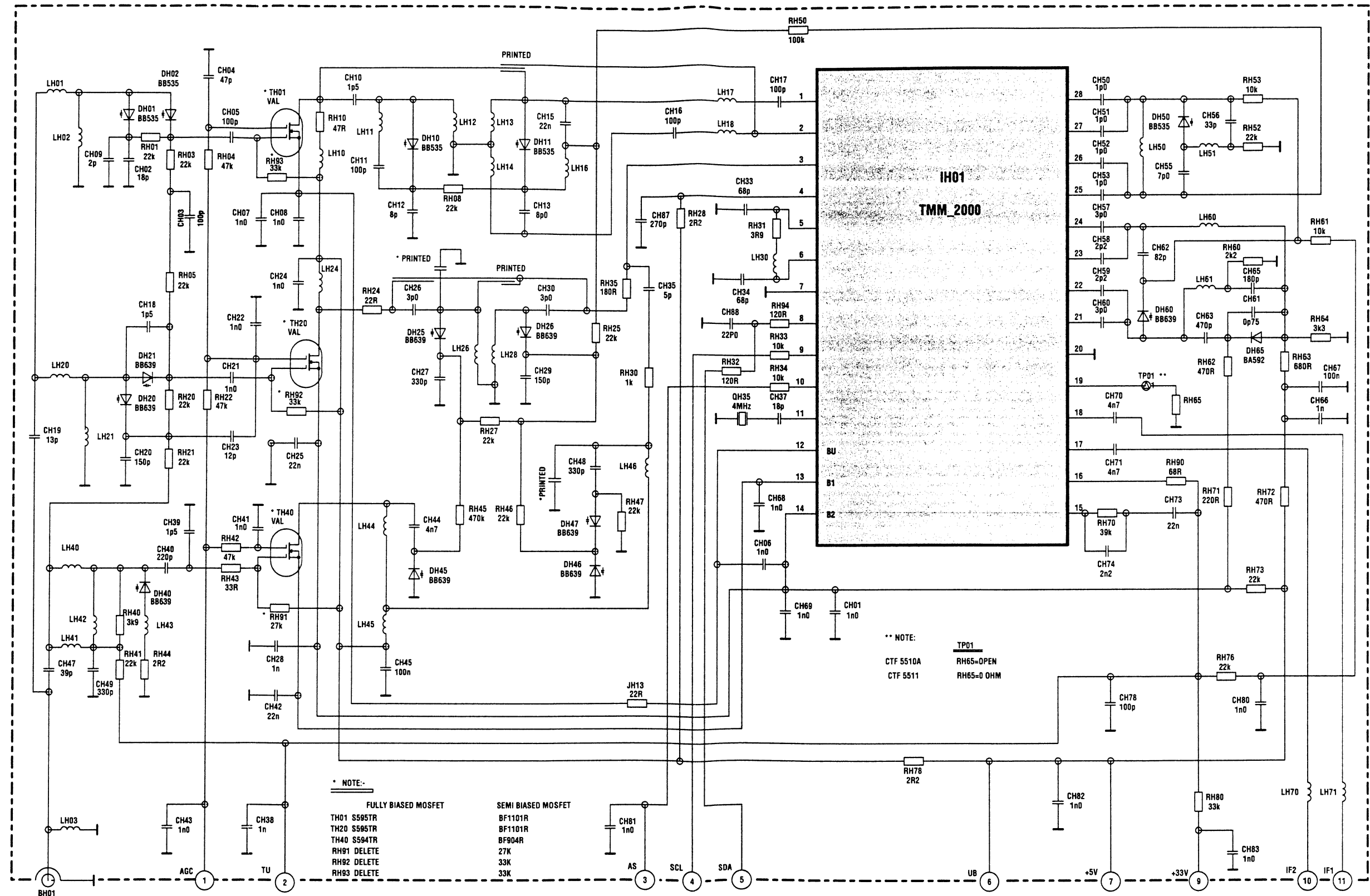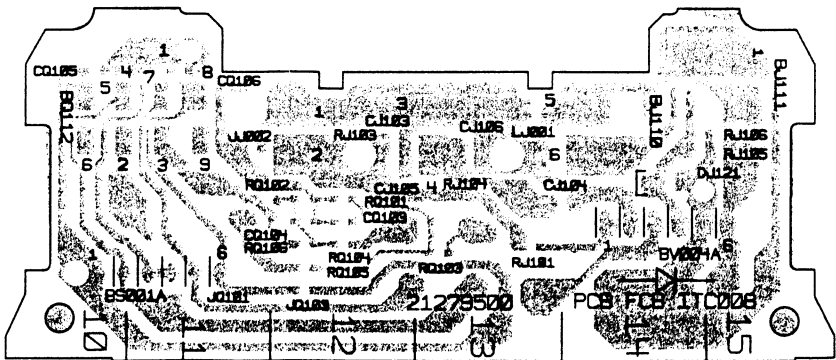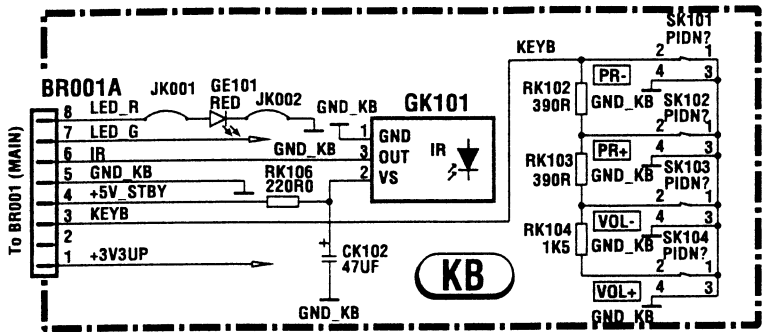
COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES

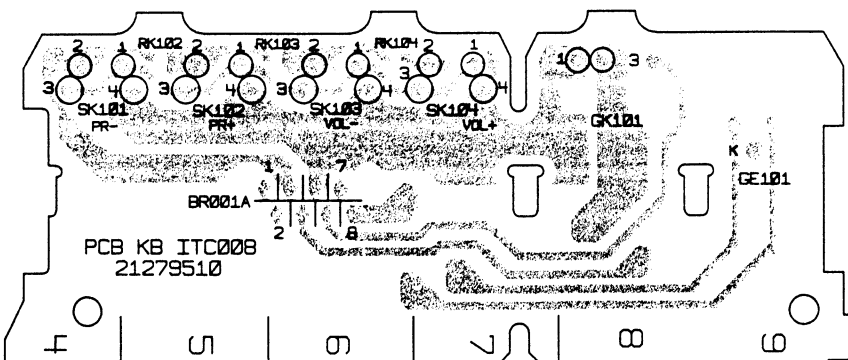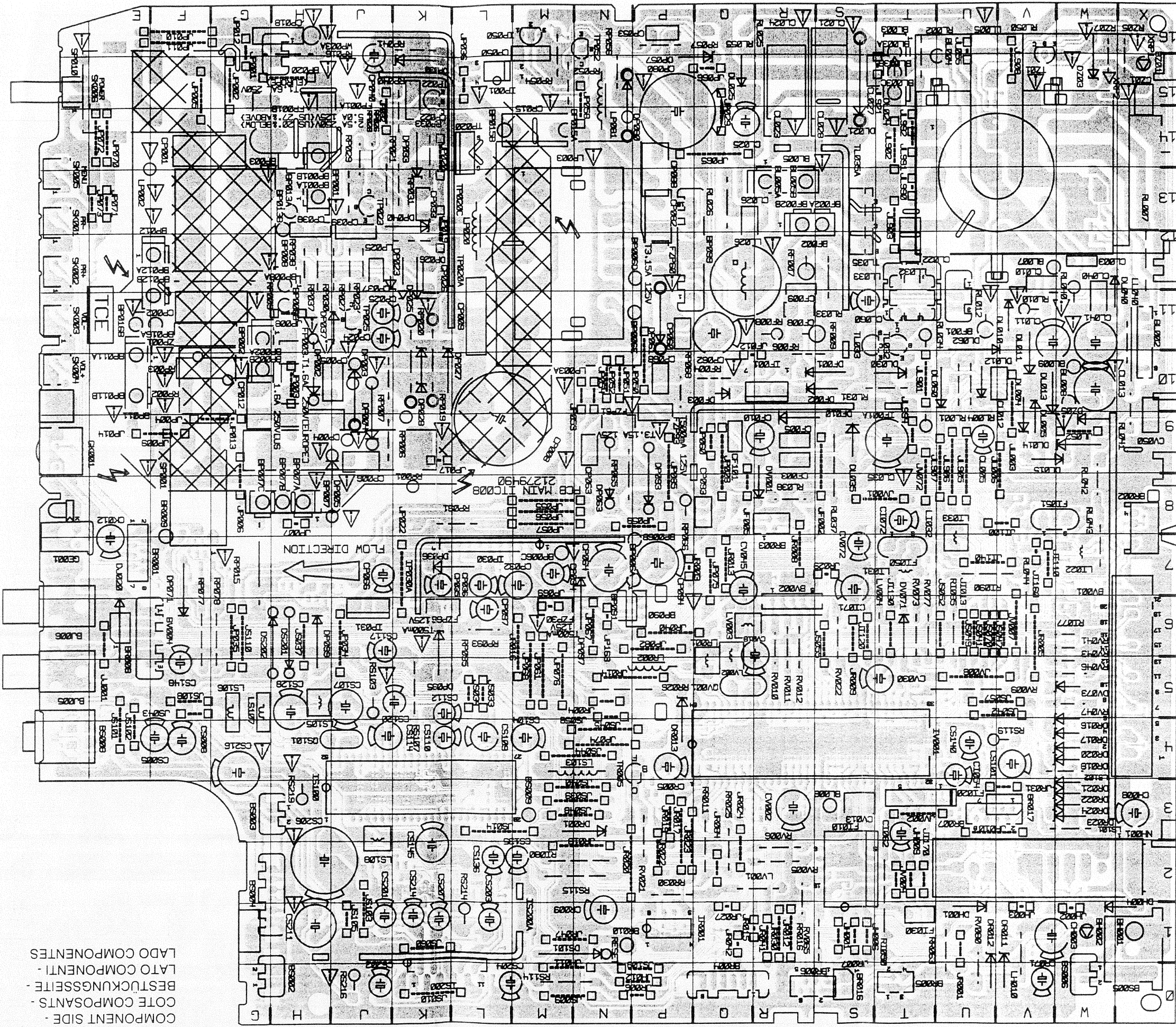COMPONENT SIDE - CÔTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES

SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS

SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS

ITC008
First issue 04 / 03

MAIN BOARD - PLATINE PRINCIPALE - CHASSIS GRUNDPLATTE - PIASTRA PRINCIPALE - PLATINA PRINCIPAL

COMPONENT SIDE -
COTE COMPOSANTS -
BESTÜCKUNGSSEITE -
LATO COMPONENTI -
LADO COMPONENTES

FCB MAIN ITC008
21279H90

FLOW DIRECTION

ITC008
First issue 04 / 03

GG HH JJ KK LL MM NN PP OO RR SS TT UU VV WW XX

PCB MAIN ITC008
21279490

SOLDER SIDE -
CÔTE SOUDURES -
LÖTSEITE -
LATO SALDATURE -
LADO SOLDADURAS

MAIN BOARD - PLATINE PRINCIPALE - CHASSIS GRUNDPLATTE - PIASTRA PRINCIPALE - PLATINA PRINCIPAL

(OS) : ONE CHIP VIDEOPROCESSING PART

MAIN

* SOME MODELS
#3 EU MONO MODELS

IV001
TDA9554PS/N1I/IVV2.30
TDA9567

COMPLETE PCB DIAGRAM - SCHEMA PLATINE PRINCIPALE EQUIPEE - SCHALTUNG LEITERPLATTE KPL - SCHEMA PIASTRA COMPLETA - ESQUEMA PLATINA EQUIPADA

MAIN

(AP) : AUDIO PART

ITC008
First issue 04/ 03

ALIGNMENT PROCEDURE - PROCESSUS DE REGLAGES - ABGLEICH - VISUALIZZAZIONE DEL VALORE DI REGOLAZIONE - PROCEDIMIENTO DE ALINEACION

SET-UP LINES

ET1 ID: S2.3

INIT	
KEY	Off
LOCK	Off
LIMIT <0-63>	32

ET1 ID:S2.3	

INIT
Initialise TV set.Press "OK" button.
Sets all Service Mode functions stored in the EEprom to their default values.
See below the default values table.

⚠ "INIT" copy all service parameters from the ROM to EEprom. It will be necessary in this case to readjust most of the service mode functions.

⚠ "INIT" copie toutes les valeurs par défaut stockées en ROM vers l'EEprom.Il peut être nécessaire dans ce cas de reprendre la plupart des réglages du mode service.

⚠ "INIT" kopiert alle Service-Parameter aus dem ROM in das EEPROM. Es ist anschliessend notwendig die meisten Service-Funktionen neu abzugleichen

⚠ "INIT" copia tutti i parametri di servizio dalla ROM alla EEprom. Sarà necessario in seguito regolare alcune funzioni in Service Mode.

⚠ "INIT" copia todos los valores por defecto memorizados en la ROM hacia la EEPROM. Puede ser necesario en el caso de tener que reajustar la mayor parte de los ajustes en Modo Servicio

Key Lock Pr+ Pr- on the front panel	ON : Disable the PR keys. Touches PR du clavier inactives. Disable the PR keys. Disable the PR keys. Disable the PR keys.
Lock Lock for Hotel Mode	Factory Setting
Limit Limit for Volume control	Factory Setting

VIDEO LINES

VG2	03		
AGC	34		
BKS*	01		
OS-B	02		
PKWS*	36	33	33
WPBS*	33		
WPGS*	33		
WPRS*	36		
BLOGS*	37		
BLORS*	32		
YD	00		
CL	11		

	◑+☼+◐ = 50%
	TV to AV or RF : White box test pattern in center. white = 100% Adjust G2 with the SCREEN potentiometer (LL005) to get 03.
VG2 G2 Alignment	Régler G2 avec le potentiomètre SCREEN (LL005) pour obtenir 03 Gleichen Sie G2 mit dem SCREEN-Potentiometer (LL005): VG2=03 Regolar il potenziomero G2 SCREEN (LL005) : VG2=03 Ajustar la G2 con el potenciómetro SCREEN (LL005): VG2=03.

AGC
AGC - Automatic Gain Control alignment

◁◖ - Minimum noise- Minimum de bruit
- Minimum Rauschen - Rumore minimo
- Minimo ruido

```
210.25 MHz    chassis ITC008
3mV           ┌Tuner┐ 11
              BG CH 10 ├─ IF
    antenna
    input     Monitor IF
              38.9 MHz
```

- Set AGC to 00
- Adjust AGC for maximum gain of IF signal.
- Reduce IF level about 8dB.
ROM Defaut Value : AGC : 20

BKS Black Stretch	Factory Setting

OS_B Sub-Brightness	◁◖ ☼+◑+◐ =50% Grey scale test pattern white =100% TV : BG or L ↑ black

PKWS / PKWP** Peak White SECAM/PAL	☼+◑ = 50% ◐ = 70% Peak white test pattern. white = 100% colourimeter

Sets	Nits
21" OT 90° sets	420 +/- 10%
21" XF-TTD	420 +/- 10%
25" XF Toshiba	300 +/- 10%
28" MP	300 +/- 10%
29" XF-Samsung	200 +/- 10%
29" XF TTD II	250 +/- 10%
33" MP	250 +/- 10%
34" XF TTD	200 +/- 10%

(Drive/Cut-off column)

Drive** WPRS / WPRP White Point Red SECAM/PAL WPGS / WPGP White Point Green SECAM/PAL WPBS / WPBP White Point Blue SECAM/PAL	◁◖ ☼+◐+◑ = 50% Grey scale test pattern white =100% ↑ white
Cut-off ** BLORS / BLORP Black Level Offset Red SECAM/PAL BLOGS / BLOGP Black Level Offset Green SECAM/PAL	◁◖ ☼+◐+◑ = 50% Grey scale test pattern white =100% ↑ grey
YD Luminance Delay	◁◖ Use ◁▷ to adjust the image
CL Cathode Level	Factory setting. Extension of the peak White range. Réglage usine. Extension des valeurs de réglages du Peak White. Fabrik-Einstellung (Umfang des Spitzenweiß Ein-bereiches) Factory Setting. Extension of the peak White range. Ajuste de fábrica. Extensión del margen del Peak White.

*Perform the G2 and the Focus settings beforehand.
Effectuez au préalable les réglages de G2 et de focus.
Stellen Sie zuvor G2 und "Focus" ein.
Effettuare le regolazioni G2 e del Fuoco innanzitutto.
Efectuar previamente los ajustes de G2 y Foco

** Adjust separate for PAL / SECAM
" S " : Video signal received is SECAM.
" P " : Video signal received is PAL.

GEOMETRY LINES

VSH	32
SC	27
VA	37
VS	38
HSH	37

VSH	◁◖	[↕ box]
SC S-Correction	◁◖	[S]
VA	◁◖	[↕ box]

VS
V_Slope
- Apply a test pattern signal to the TV with a single horizontal and vertical line on the screen.
- Select the "VS" line of the menu. The bottom half of the screen will go black.
- Adjust VS until the centre line of the pattern is just invisible.
- Leave the line "V_Slope".
- Switch the test pattern signal to the crosshatch geometry pattern.
- Perform the geometry adjustments described below.

- Appliquer une mire de barres avec seulement une ligne blanche horizontale en milieu de l'écran.
- Sélectionner la ligne "V-Slope". La moitié basse de l'écran devient noire.
- Aligner "V_Slope" pour que la ligne médiane soit à peine non visible.
- Commuter la mire en mode de réglage de géométrie (quadrillage).
- Effectuer les réglages de geometrie ci- après.

- Speisen Sie ein Testbild mit einem horizontalen Strich in der Bildmitte ein.
- Wählen Sie im Menü die Funktion "V-Slope" an. Die untere Bildhälfte wird dunkel.
- Stellen Sie "V-Slope" so ein, daß die Mittellinie fast verschwindet.
- Verlassen Sie die Funktion "V-Slope".
- Speisen Sie ein Gittertestbild ein.
- Nehmen Sie die Geometrieeinstellungen wie nebenstehend beschrieben vor.

- Applicare un monoscopio con un'unica linea bianca orizzontale al centro dello schermo
- Selezionare la riga "V slope" del menu. La parte bassa dello schermo viene oscurata.
- Allineare la "Vertical Slope" in modo che la linea centrale sia appena visibile
- Abbandonare la riga "V slope".
- Posizionare il monoscopio
- Effettuare le regolazioni di geometria descritte in precedenza
- Memorizzare.

- Aplique una carta de ajuste con sólo una línea blanca horizontal y una vertical en el centro de la pantalla.
- Seleccionar en el menú, la línea "V-Slope". La mitad inferior de la pantalla se pondrá oscura.
- Ajuste "V-Slope" justo hasta que la línea horizontal sea invisible.
- Cambiar la carta de ajuste a "cuadrícula" y efectuar los ajustes de geometria descritos a continuación
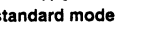- Antes de salir, memorizar con "Store"

HSH	◁◖	[↔ box]

V-Slope

[Correct] [Incorrect]

IF / SET-UP LINES

OIF	24

OIF Offset IF demodulator	Factory Setting OIF=24H

VIDEO PROCESSOR LINES*

SOC*	03

SOC* Peak White Limiting	Factory Setting SOC=03H

* According to software version.
Selon version de software.

GEOMETRY MODE ALIGNMENT

90° tube
Signal : 50 Hz - 4/3 test pattern

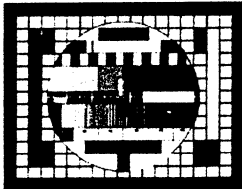| 4/3 standard mode	Overscan V=107% , H=107%
[test pattern]	1 - Adjust Horizontal Centering (HS) [↔] 2 - Adjust Vertical centering (VSH) and Vertical amplitude 107% (VA) 3 - Adjust Vertical Slope (VS) and linearity (SC) [↕][↕][≣] 4-If necessary repeat VSH, VA alignment to 7% overscan.

110° tube
Signal : 50 Hz - 4/3 test pattern

| 4/3 standard mode	Overscan V=107% , H=107%
[test pattern]	**EAST-WEST MODULE** 1 - PL140 : Turn fully counterclockwise. **MAIN BOARD** 2 - Adjust Horizontal Centering (HS) [↔] 3 - Adjust Vertical centering (VSH) and Vertical amplitude 107% (VA) 4 - Adjust Vertical Slope (VS) and linearity (SC) [↕][↕][≣] 5 - If necessary repeat VSH, VA alignment to 7% overscan. **EAST-WEST MODULE** 6 - PL140 : Adjust Horizontal amplitude with PL140 for optimum overscan. [↔] 7 - PL141 :Adjust Pincushion. [)(] 8 - PL143 : Adjust Trapezium [/\] 9 -If necessary repeat Horizontal amplitude, pincushion correction and trapezium alignment

EACEM - SECTION CODES

COMMON

ANT	ANTENNA SECTION
APR	SIGNAL PROCESSING (ANALOG)
BCH	BATTERY CHARGE
CLK	CLOCK/TIMER SECTION
CPA	COLOUR PROCESSING/ANALOG
CTR	CONTROL PANEL
DPR	SIGNAL PROCESSING (DIGITAL)
ERA	ERASE CIRCUIT
FLX	FLEXIBLE PRINTED CIRCUIT BOARD
HFS	HIGH FREQUENCY SECTION (RF)
IDS	INFORMATION DISPLAY SECTION
IFC	IF-CIRCUIT
ILN	i.LINK (IEEE1394) SECTION
INP	SIGNAL INPUT SECTION
IRD	INFRARED (IrDA) SECTION
MEM	MEMORY CIRCUIT
OUT	SIGNAL OUTPUT SECTION
PRG	PROGRAMMING SECTION
PRT	PROTECTION CIRCUIT
PSU	POWER SUPPLY
PWA	POWER AMP SECTION
REM	REMOTE CONTROL SECTION
RFU	BOOSTER,RF UNIT
SFT	SOFTWARE (TAPE, DISC, ETC.)
SNS	SENSOR UNIT
SVO	SERVO SECTION
SYS	SYSTEM CONTROL SECTION
TUN	TUNING SECTION
TXT	TEXT PROCESSING

SOUND-RELATED

APA	AUDIO PROCESSING/ANALOG
APD	AUDIO PROCESSING/DIGITAL
CDC	CD CHANGER SECTION
CDS	CD SECTION
MDC	MD CHANGER SECTION
MDS	MINIDISC SECTION
MIC	MICROPHONE SECTION
PUD	PICK-UP DEVICE
SHD	STATIONARY HEAD(S)
SPK	SPEAKER

PICTURE-RELATED

CAM	CAMERA CIRCUIT
CPD	COLOUR PROCESSING/DIGITAL
CRT	PICTURE TUBE
DFL	DEFLECTION CIRCUIT
DVD	DVD SECTION
FPK	FOCUS PACK
IMG	IMAGE DISPLAY UNIT

PICTURE-RELATED

LCD	LCD SECTION
LMP	LAMP/FLASH SECTION
VPA	VIDEO PROCESSING/ANALOG
VPD	VIDEO PROCESSING/DIGITAL
VWF	VIEWFINDER

PC-RELATED

FDD	FLOPPY DISC DRIVE
FMW	FIRMWARE
HDD	HARD DISC DRIVE
ISA	ISA SECTION
JST	JOYSTICK
KBD	KEYBOARD (SEPARATE)
MDM	MODEM SECTION
NIF	NETWORK INTERFACE
PAR	PARALLEL PORT
PCC	PC CARD
PCI	PCI SECTION
SCS	SCSI PORT
SER	SERIAL PORT
USB	USB PORT

MECHANICAL

ARM	ARM MECHANISM
BZL	BEZEL
CBT	CABINET
CHA	CHASSIS
DDM	DISC DRIVE MECHANISM
EXC	EXTERNAL CONNECTOR
HCM	HEAD CARRIAGE MECHANISM
HOL	CASSETTE HOLDER
INC	INTERNAL CONNECTOR
LDG	LOADING MECHANISM
LNM	LENS MECHANISM
PFM	PAPER FEED MECHANISM
PIN	PINCH ROLLER/LEVER
PRI	PRINT BLOCK
RFM	RIBBON FEED MECHANISM
RHD	ROTARY HEAD(S)
SLD	SLED MECHANISM
SRS	SUPPLY REEL SECTION
STA	STATIC BLOCK
TDM	TAPE DRIVE MECHANISM
THR	THREADING MECHANISM
TNR	TENSION REGULATOR
TPT	TAPE PATH
TRS	TAKE-UP REEL SECTION
WIR	LEAD WIRE
XXX	CABINET/COSMETIC PARTS

DEFECT CODES

MECHANICAL

A	WORN OUT (OR GENERAL MECHANICAL DEFECT)
A1	MISOPERATING
B	DIRTY, CLOGGED
C	MECHANICALLY MISALIGNED
D	CUT, BROKEN
E	DEFORMED
F	SNAPPED
G	SCRATCHED, DENTED, SHARP EDGES
H	CRACKED, PEELED, CORRODED, MELTED
I	LOOSE/OFF/STRIPPED
J	SHAKY, UNSTABLE
K	LEAKING (MECHANICAL)
L	DRY (NO LUBRICANT)
M	FOREIGN OBJECT

ELECTRICAL

N	DEFECTIVE ELECTRICAL COMPONENT/MODULE
O	BURNT, ARCING, MISSING PIXELS
P	ELECTRICALLY MISALIGNED/WRONG SETTING
Q	SHORT CIRCUIT
R	OPEN CIRCUIT
S	LEAKING (ELECTRICAL)
T	BAD CONTACT, CONNECTION
T1	BAD EARTH CONNECTION
U	OPEN PATTERN
V	CRACKED PRINTED CIRCUIT BOARD
W	COLD OR NO SOLDERING
X	BRIDGED SOLDERING
Y	WRONG COMPONENT/MODULE
Z	MISSING COMPONENT/MODULE
1	SOFTWARE PROBLEM
11	LOSING DATA FROM MEMORY
12	FAULTY PROGRAM SETTING/INSTALLATION
13	SOFTWARE DEFECTIVE OR INCOMPLETE
14	SOFTWARE SETUP PROBLEM
15	NO IDENTIFICATION / AUTHENTICATION OF PRODUCT OR USER
2	EXHAUSTED, LOW EMISSION
3	NO PROBLEM FOUND (SET WITHIN SPEC)
4	NO PROBLEM FOUND - CUSTOMER MISUNDERSTANDING
5	NO PROBLEM FOUND - LOCAL CONDITIONS
51	FAULTY MAINS VOLTAGE
6	UNABLE TO DIAGNOSE FAULT
7	INCORRECTLY WIRED/ASSEMBLED
81	INCORRECT EQUIPMENT CONNECTION
9	CUSTOMER MISUSE
93	UNAUTHORISED MODIFICATION

REPAIR CODES

A	REPLACEMENT		Q	PREVENTIVE ACTION WITHOUT PARTS REPLACEMENT
B	MECHANICAL ALIGNMENT		U	EXPLANATION FOR CUSTOMER
C	ELECTRICAL ALIGNMENT		V	COST ESTIMATION REFUSED
D	RESOLDERING		W	COST ESTIMATION WITH PARTS
D1	REFITTING, PUT BACK IN POSITION (CONNECTOR, TUBE...)		X	COST ESTIMATION WITHOUT PARTS
E	CLEANING		Y	RETURN WITHOUT REPAIR
F	LUBRICATION		Z	PRODUCT EXCHANGE
G	REPAIRED ELECTRICAL PARTS		Z1	PRODUCT EXCHANGE (REPAIR TOO EXPENSIVE)
H	REPAIRED MECHANICAL PARTS		Z2	PRODUCT EXCHANGE (TOO MANY VISITS/REPAIRS)
I	MODIFICATION REQUESTED BY MANUFACTURER		Z3	PRODUCT EXCHANGE (PARTS NOT AVAILABLE)
J	REMOVED		Z4	PRODUCT EXCHANGE (IMPOSSIBLE TO REPAIR)
K	ADDED		Z5	PRODUCT EXCHANGE (ON REQUEST OF RETAILER)
L	FUNCTIONAL CHECK		Z6	PRODUCT EXCHANGE (ON REQUEST OF MANUFACTURER)
M	SPECIFICATION MEASUREMENT		1	SOFTWARE CORRECTION/RESET
N	MAINTENANCE		2	SOFTWARE UPGRADE
O	REFURBISHING, RECONDITIONING		3	PRODUCT UPGRADE (ON REQUEST)
P	PREVENTIVE PARTS REPLACEMENT			

EXAMPLE OF USE:

FLAG	SYMPTOM CODE	PART NO.	REF. NO.	SECTION	PCB	DEFECT CODE	REPAIR CODE	QTY
1 .	1 4 1 2 / 3 6 4 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 / 3 4 5 6 7 8 9 X X X X X X X X X / 1 1 1	R 1 2 3 . . . / 1 1 1	T D M	Y A 2 2 . . .	C 1	Z 1	. .

FLAG: INDICATES THE ONE MAJOR SYMPTOM/PART COMBINATION BY '1'

COMPLETE PCB DIAGRAM - SCHEMA PLATINE PRINCIPALE EQUIPEE - SCHALTUNG LEITERPLATTE KPL - SCHEMA PIASTRA COMPLETA - ESQUEMA PLATINA EQUIPADA

COMPLETE PCB DIAGRAM - SCHEMA PLATINE PRINCIPALE EQUIPEE - SCHALTUNG LEITERPLATTE KPL - SCHEMA PIASTRA COMPLETA - ESQUEMA PLATINA EQUIPADA

(DP) : DEFLECTION PART   (MAIN)

CIRCUIT DIAGRAM MAIN BD

ITC008
First issue 04 / 03

CONDITION CODE

Code	Condition
1	CONSTANTLY
2	INTERMITTENTLY
3	AFTER A WHILE
4	IN A HOT ENVIRONMENT
5	IN A COLD ENVIRONMENT
6	WHEN SWITCHING
7	UNDER VIBRATION
8	IN A DAMP/WET/RAINY/SNOWY ENVIRONMENT
9	IN A DRY ENVIRONMENT
A	AFTER BEING DROPPED/TRANSPORT DAMAGE
B	AFTER LIGHTNING STRIKE
C	ONLY CERTAIN STATIONS/SOFTWARE/CHANNELS/MODE/FREQUENCY BAND
D	ONLY ON CERTAIN STANDARDS
E	ONLY ON ONE CHANNEL
F	ONLY WITH CERTAIN INPUT(S)
G	ONLY ON CERTAIN OUTPUT(S)
H	IN STANDBY/OFF MODE
J	AT EDIT POINT
K	WHEN INTERCONNECTED
L	LIQUID CONTAMINATION
M	FOR A SHORT WHILE AFTER SWITCH-ON
N	AFTER MAKING A COPY
O	UNDER STRESSED CONDITIONS / HIGH LOAD
P	AT SWITCH-OFF

1 — GENERAL

1 NO ACTION	2 LEVEL	3 QUALITY	4 NOISE
110 POWER PROBLEM OR NOT OPERATING	120 CHARGING PROBLEM	130 DISPLAY FUNCTION PROBLEM	140 ABNORMAL NOISE
111 NO POWER	121 NO BATTERY CHARGING	131 FAULTY DISPLAY	141 CRT DISCHARGING NOISE
112 NO POWER WHEN USING AC-ADAPTER	122 INCOMPLETE BATTERY CHARGE	132 FAULTY LAMP/LED OPERATION	142 EHT DISCHARGING NOISE
113 NO POWER WHEN USING DRY BATTERIES	123 CHARGING TIME TOO LONG	133 FAULTY LEVEL METER OPERATION	143 NOISY CABINET/CRACKING TRAYS
114 NO POWER WHEN USING RECHARGEABLE BATTERIES	12X OTHER 'CHARGING' PROBLEM	134 FAULTY ON-SCREEN DISPLAY OPERATION	144 NOISY TRANSFORMER/HUMMING
115 NO POWER FROM SOLAR CELL		135 ELECTRONIC TUNING DISPLAY FAULT	145 NOISY COMPONENT(S)
116 NO POWER WHEN USING A CAR BATTERY		136 MECHANICAL TUNING DISPLAY FAULT	146 RATTLE
117 SHORT OPERATION TIME/SHORT BATTERY LIFE		137 FAULTY TIME CODE DISPLAY	147 CLICKING
118 POWER-OFF FUNCTION NOT WORKING		138 FAULTY ALARM/ERROR DISPLAY	148 CLOCK NOISE
119 NO SWITCH-ON FROM STANDBY		139 DISPLAY DIM/TOO DARK	149 CRACKING
11A POWERS UP, BUT NO OPERATION		13A UNUSUAL OR INCORRECT MESSAGE IN DISPLAY	14A WHISTLING
11B CYCLIC POWER ON/OFF		13B NO BACKLIGHT	14X OTHER 'ABNORMAL' NOISE
11C BLOWING EXTERNAL (MAINS) FUSE		13C BEEPS, NO DISPLAY	
11D SET SWITCHES OFF BY ITSELF		13D WARNING LIGHT DOES NOT WORK	
11E BACKUP BATTERY PROBLEM		13E WARNING LIGHT LIGHTS UP	
11F NOT OPERATING		13X OTHER 'DISPLAY FUNCTION' PROBLEM	
11G NO AUTOMATIC SWITCH ON/OFF			
11H PROTECTION SWITCH/FUSE IN SET TRIGGERS			
11J RECHARGEABLE BATTERY NOT RECOGNIZED			
11X			

2 — COMMUNICATION

210 NO RECEPTION OR CONNECTION	220 POOR RECEPTION OR CONNECTION	230 TRANSMISSION/CONNECTION PROBLEM	240 NOISY RECEPTION/TRANSMISSION
211 NO AM RECEPTION	221 POOR AM RECEPTION	231 NO TRANSMISSION/CONNECTION	241 LINE NOISE
212 NO FM RECEPTION	222 POOR FM RECEPTION	232 POOR TRANSMISSION/CONNECTION	242 OSCILLATION
213 NO SW RECEPTION	223 POOR SW RECEPTION	233 TRANSMISSION LEVEL TOO HIGH	243 INTERSTATION INTERFERENCE
214 NO VHF RECEPTION	224 POOR VHF RECEPTION	234 NO TRANSMISSION BETWEEN BASE UNIT AND HANDSET	24X OTHER 'NOISY RECEPTION/TRANSMISSION' PROBLEM
215 NO UHF RECEPTION	225 POOR UHF RECEPTION	235 POOR TRANSMISSION BETWEEN BASE UNIT AND HANDSET	
216 NO BS RECEPTION	226 POOR BS RECEPTION	236 NO IR TRANSMISSION	
217 NO CS RECEPTION	227 POOR CS RECEPTION	237 ONE-SIDED CONNECTION	
218 NO HDTV RECEPTION	228 POOR HDTV RECEPTION	238 MODEM HANGS UP IMMEDIATELY ONCE CONNECTED	
219 NO GPS/OPS RECEPTION	229 POOR GPS/OPS RECEPTION	239 MODEM DROPS LINE DURING CONNECTION	
21A NO RECEPTION OF DIGITAL BROADCASTING	22A POOR RECEPTION OF DIGITAL BROADCASTING	23X OTHER 'TRANSMISSION/CONNECTION' PROBLEM	
21B NO IR RECEPTION	22B POOR IR RECEPTION		
21C NO DIAL TONE	22X OTHER 'POOR RECEPTION' PROBLEM		
21D NO MODEM/FAX CONNECTION			
21E MODEM NOT ANSWERING/NO CARRIER			
21F NO NETWORK CONNECTION/NETWORK INITIALIZATION FAILS			
21X OTHER 'NO RECEPTION' PROBLEM			

3 — PICTURE

310 NO PICTURE	320 PICTURE LEVEL PROBLEM	330 PICTURE QUALITY PROBLEM	340 PICTURE NOISE
311 NO PICTURE IN E TO E MODE	321 PICTURE TOO DARK	331 POOR PICTURE RESOLUTION	341 SNOWY PICTURE
312 NO PICTURE IN PLAYBACK MODE	322 PICTURE TOO BRIGHT	332 POOR FOCUS	342 DOT NOISE OR DROPOUT ON PICTURE
313 NO PICTURE IN VIEWFINDER	323 CONTRAST TOO LOW	333 RINGING ON PICTURE	343 NOISE BARS ON PICTURE
314 NO PICTURE, ONLY RASTER	324 CONTRAST TOO HIGH	334 EXCESSIVE SMEAR/LAG	344 BLANKING LINES ON PICTURE
315 NO RASTER, ONLY BLACK PICTURE	325 SATURATED WHITE OR BLACK LEVEL	335 POOR LINEARITY OR GEOMETRY	345 BEATING ON PICTURE
316 ONLY HORIZONTAL LINE	326 SHADING ON PICTURE	336 GHOSTING ON PICTURE	346 GHOSTING ON PICTURE
317 ONLY VERTICAL LINE	327 ONLY PARTIAL PICTURE	337 INCORRECT CENTRING OF PICTURE	347 VCR HEAD SWITCHING NOISE ON PICTURE
318 NO PICTURE IN LCD	32X OTHER 'PICTURE LEVEL' PROBLEM	338 PICTURE SLANTED	348 OVERMODULATION NOISE
319 NO 2nd (OR HIGHER) MONITOR DISPLAY		339 V-SIZE INCORRECT	349 MOIRÉ
31X OTHER 'NO PICTURE' PROBLEM		33A H-SIZE INCORRECT	34A MOSAIC NOISE
		33X OTHER 'PICTURE QUALITY' PROBLEM	34B SCRAMBLED PICTURE
			34X OTHER 'PICTURE NOISE' PROBLEM

4 — COLOUR

410 NO COLOUR	420 COLOUR LEVEL PROBLEM	430 POOR COLOUR QUALITY	440 NOISY COLOUR
411 NO COLOUR IN E TO E MODE	421 WEAK COLOUR	431 SOME OR ALL COLOURS MISSING	441 COLOUR NOISE ON A BLACK & WHITE PICTURE
412 NO COLOUR IN PLAYBACK MODE	422 EXCESSIVE COLOUR	432 POOR WHITE BALANCE	442 COLOUR STREAKING
413 NO COLOUR IN VIEWFINDER	42X OTHER 'COLOUR LEVEL' PROBLEM	433 HUE PROBLEM	443 COLOUR BARS ON PICTURE
414 NO COLOUR IN PART OF PICTURE		434 PURITY ERROR	44X OTHER 'COLOUR NOISE' PROBLEM
41X OTHER 'NO COLOUR' PROBLEM		435 LANDING ERROR/WHITE UNIFORMITY	
		436 CONVERGENCE ERROR	
		437 REGISTRATION ERROR	
		438 PITCH MOIRÉ/RAINBOW PATTERN	
		439 COLOUR SHIFT	
		43X OTHER 'COLOUR QUALITY' PROBLEM	

5 — AUDIO

510 NO AUDIO	520 AUDIO LEVEL PROBLEM	530 AUDIO QUALITY	540 NOISY AUDIO
511 NO SOUND IN E TO E MODE	521 LOW AUDIO LEVEL	531 POOR FREQUENCY RESPONSE	541 HUM
512 NO PLAYBACK OF OUTGOING MESSAGE(S)	522 EXCESSIVE AUDIO LEVEL	532 DISTORTED AUDIO	542 HISS
513 NO PLAYBACK OF INCOMING MESSAGE(S)	523 NO OR POOR TREBLE	533 NO OR POOR BASS	543 CROSSTALK
514 NO AUDIO PLAYBACK	524 FADER PROBLEM	534 NO OR POOR BASS	544 STATIC, POP OR CLICK NOISE
515 NO SOUND FROM HANDSET	525 AUDIO LEVEL REMAINING/NO MUTING	535 EARPHONE/HEADPHONE AUDIO POOR	545 BUZZ
516 NO SOUND FROM EARPHONE/HEADPHONE	52X OTHER 'AUDIO LEVEL' PROBLEM	53X OTHER 'AUDIO QUALITY' PROBLEM	546 SCRATCHING NOISE
517 NO SOUND FROM SPEAKER			547 IGNITION NOISE
518 NO MICROPHONE SOUND			548 WHISTLING/MULTIPATH NOISE
519 NO SOUND FROM DIGITAL OUTPUT			549 DATA/DIGITAL NOISE
51X OTHER 'NO AUDIO' PROBLEM			54X OTHER 'AUDIO NOISE' PROBLEM

6 — MECHANISM

610 NO MECHANICAL OPERATION	620 IRREGULAR MECHANICAL OPERATION	630 SPEED PROBLEM	640 MECHANICAL NOISE
611 NO ROTATION OF MOTOR/DISC	621 IRREGULAR ROTATION	631 SPEED TOO FAST	641 ROTATION NOISE DRUM NOISE
612 NO ROTATION OF MOTOR/DISC	622 IRREGULAR FORWARD MODE	632 SPEED TOO SLOW	642 MOTOR NOISE
613 NO FORWARD OPERATION	623 IRREGULAR REVERSE OPERATION	633 SPEED UNADJUSTABLE	643 WIND/AIR NOISE
614 NO REVERSE OPERATION	624 IRREGULAR FAST FORWARD OR REWIND	63X OTHER 'SPEED' PROBLEM	644 SQUEALING
615 NO FAST FORWARD OR REWIND FUNCTION	625 IRREGULAR LOADING OF MEDIA		645 FAN NOISE
616 NO LOADING	626 IRREGULAR UNLOADING OR EJECTING		646 DISC SCRAPING
617 NO UNLOADING OR EJECTING	627 IRREGULAR AUTO SHUT-OFF OPERATION		647 NOISY TAPE LOADING
618 NO AUTO SHUT-OFF OPERATION	628 IRREGULAR TONEARM MOVEMENT		648 GEAR NOISE
619 DISC NOT BEING EJECTED	629 IRREGULAR EJECTION OF DISC		649 CONTROL OR SWITCH NOISY
61A MAGAZINE OR MODULE LOADING/UNLOADING	62A IRREGULAR DIRECTION CHANGE		64A GRINDING
61B TONEARM DOES NOT MOVE	62B FAULTY DISC CHANGE OPERATION		64B RUMBLING
61X CONTROL/SWITCH NOT WORKING	62X OTHER 'IRREGULAR MECHANICAL OPERATION' PROBLEM		64C VIBRATION NOISE
			64X OTHER 'MECHANICAL NOISE' PROBLEM

7 — DATA PROCESSING

710 NO DATA PROCESSING OPERATION	720 FAULTY DATA PROCESSING OPERATION	730 DATA DISPLAY PROBLEM	740 KEYBOARD/POINTING DEVICE
711 NO INITIAL SCREEN	721 INCORRECT CHARACTER DISPLAY	731 INCORRECT CHARACTER DISPLAY	741 MOUSE/TRACKBALL/TRACKPAD NOT WORKING
712 SYSTEM DOES NOT RESET	722 SYSTEM RESET WHILE BEING USED	732 MISSING DISPLAY CHARACTERS	742 KEYBOARD LOCKS UP
713 SYSTEM DOES NOT BOOT UP	723 SYSTEM LOCKS OUT/CRASHES/HANGS	733 FAULTY GRAPHIC DISPLAY	743 POINTING DEVICE LOCKS UP
714 NO OPERATION FROM PLUG-IN MODULE/PERIPHERAL	724 NO OPERATION OF PLUG-IN MODULE	734 FAULTY SWITCHING BETWEEN GRAPHIC/CHARACTER MODE	744 STICKY KEY(S)
715 NO KEYBOARD OPERATION	725 FAULTY KEYBOARD OPERATION	735 FAULTY PROMPT/CURSOR OPERATION	745 INOPERATIVE KEY(S)
716 NO OPERATION FROM OTHER INPUT/OUTPUT DEVICE	726 FAULTY OPERATION OF OTHER INPUT/OUTPUT DEVICE	736 DATA DISPLAY LOCATION INCORRECT	746 POINTING DEVICE NOT TRACKING PROPERLY
717 NO DATA STORAGE OPERATION	727 FAULTY DATA STORAGE OPERATION	737 NO PAGING OR SCROLL MODE	747 POINTING DEVICE JITTERY
718 NO DATA COMMUNICATION	728 FAULTY DATA COMMUNICATION	73X OTHER 'DATA DISPLAY' PROBLEM	748 LEFT- OR RIGHT CLICK BUTTON INOPERATIONAL
719 ERROR MESSAGE ON MODULE	729 MEMORY ERROR		749 TRACKPAD SURFACE DAMAGED
71A FDD BOOT FAILURE	72A REQUIRES SET UP AT BOOTING		74A KEYBOARD KEY(S) DAMAGED
71B HDD BOOT FAILURE	72X OTHER 'FAULTY DATA PROCESSING' PROBLEM		74X OTHER KEYBOARD/POINTING DEVICE PROBLEM
71X OTHER 'NO DATA PROCESSING' PROBLEM			

8 — PRINT/COPY/SCAN

810 NO PRINT/COPY/SCAN OPERATION	820 ERRONEOUS PRINT/COPY/SCAN OPERATION	830 POOR PRINT QUALITY	840 NOISY PRINTING
811 NOT PRINTING	821 PRINT IMAGE REVERSED (NEGATIVE/POSITIVE)	831 INCORRECT PRINTING POSITION	841 PRINTING NOISE
812 NO COMMUNICATION WITH PRINTER	822 IRREGULAR PAPER FEED	832 LOW PRINT CONTRAST	842 DIRTY PRINTING
813 NO PAPER FEEDING	823 ERRONEOUS PRINT MODE SWITCHING	833 EXCESSIVE PRINT CONTRAST	843 UNPLEASANT SMELL (OZONE)
814 PAPER NOT LOADING	824 COPY TOO DARK	834 BLURRED PRINT IMAGE	844 BLACK LINES/STRIPES IN FEED DIRECTION
815 NO IMAGE FIXATION	825 COPY TOO BRIGHT	835 PRINT IMAGE NOT SHARP	845 WHITE LINES/STRIPES IN FEED DIRECTION
816 NO DOCUMENT FEEDING	826 BLACK COPY	836 DOTS MISSING IN PRINT IMAGE	846 BLACK LINES/STRIPES ACROSS FEED DIRECTION
817 SCANNER NOT WORKING	827 WHITE COPY	837 COLOUR STREAKING	847 WHITE LINES/STRIPES ACROSS FEED DIRECTION
81X OTHER 'NO PRINT/COPY/SCAN OPERATION' PROBLEM	828 POOR COLOUR LEVELS	838 NO COLOUR IN PART OF PICTURE	84X OTHER 'NOISY PRINTING' PROBLEM
	829 IRREGULAR DOCUMENT FEED	839 PRINT IMAGE/COPY INCOMPLETE	
	82A FAULTY CORRECTION FUNCTION	83A FAULTY CALIBRATION	
	82X OTHER 'PRINT/COPY/SCAN OPERATION' PROBLEM	83X OTHER 'PRINT QUALITY' PROBLEM	

SYMPTOM CODE TABLE (5–8)

5 — (General column headers)

5 UNSTABLE	6 RECORDING & PHYSICAL PROBLEMS	7 SPECIAL FUNCTIONS	8 OTHER CONDITIONS
150 REMOTE CONTROL PROBLEM	160 PHYSICAL DAMAGE	170 GENERAL FUNCTION PROBLEM	180 SPECIAL REQUIREMENTS
151 NO REMOTE CONTROL OPERATION	161 DAMAGED/DEFORMED CABINET/PANEL	171 FAULTY CLOCK FUNCTION	181 TEST AND CHECK
152 INCORRECT REMOTE CONTROL OPERATION	162 DAMAGED HANDLE/CLIP	172 FAULTY SLEEP FUNCTION	182 GENERAL OVERHAUL
153 REMOTE CONTROL PROGRAMMING/LEARNING MODE PROBLEM	163 DAMAGED CONTROL KNOB(S)/BUTTON(S)/KEYPAD	173 SYSTEM/FREQUENCY CONVERSION	183 INITIAL SETUP/INSTALLATION REQUESTED
154 POOR REMOTE CONTROL SENSITIVITY	164 DAMAGED DOOR/COVER	174 FAULTY TIMER OPERATION	184 INITIAL SETUP/INSTALLATION REQUESTED
15X OTHER 'REMOTE CONTROL' PROBLEM	165 DAMAGED SEAL	175 PROGRAMMING/USER ADJUSTMENT PROBLEM	185 MODIFICATION/CIRCUIT/INSTALLATION CHANGE
	166 DAMAGED PLUG/SOCKET/TERMINAL/CONNECTOR	176 FAULTY RECORD MUTE OPERATION	186 WRONG PRODUCT IN CARTON
	167 DAMAGED LENS	177 FAULTY PROGRAMMED PLAYBACK OPERATION	187 ACCESSORY MISSING
	168 DAMAGED CARTRIDGE OR STYLUS	178 FAULTY MEMORY FUNCTION	188 UNABLE TO CONNECT PARTS/-TO ASSEMBLE
	169 DAMAGED ANTENNA	179 FAULTY INPUT SWITCHING	189 WRONG COLOUR
	16A DAMAGED CRT OR VIEWFINDER/LCD DISPLAY	17A FAULTY OUTPUT SWITCHING	18A BATTERY MOUNTING PROBLEM
	16B MISSING COMPONENT(S) OR ORNAMENTAL PARTS	17B ELECTRIC SHOCK/STATIC DISCHARGE	18B OTHER SPECIAL REQUIREMENTS
	16C PRINTED MARKINGS ERASED/PEELED OFF	17C FAULTY SEARCH FUNCTION (INDEX/VIEW/TITLE/CHAPTER/TRACK...)	18X SYMPTOM NOT AVAILABLE
	16D SET BURNING/EMITS SMOKE	17D WRONG LANGUAGE/CHARACTER SET	18Z
	16E EXTERNAL SURFACE DAMAGE (BUBBLING/PEELING/RUSTING/SCRATCHED)	17E ERROR CODE APPEARS IN DISPLAY	
	16F SMELL	17F SWITCH NOT OPERATING	
	16G WEAK/DAMAGED STAND	17G PEDAL NOT OPERATING	
	16H DAMAGED SPEAKER	17H FAULTY STANDBY MODE	
	16J SET GETS VERY HOT / PARTS MELTING	17J FAULTY HIBERNATION MODE	
	16K BURNING SUBSTANCE ON/IN UNIT	17K NO AUDIBLE WARNING SIGNAL	
	16L BURNING MARKS	17L FAULTY OPERATION OF PARENTAL LOCK/KEYLOCK FUNCTION	
	16M INTERNAL SURFACE DAMAGE (BUBBLING/PEELING/RUSTING/SCRATCHED)	17M FAULTY MODE SWITCHING	
	16N DAMAGED POWER CABLE	17N MENU FUNCTION PROBLEM	
	16P DAMAGED ACCESSORY	17P	
	16Q DISCOLOURATION	17X OTHER 'GENERAL FUNCTION' PROBLEM	
	16X OTHER PHYSICAL DAMAGE		

250 UNSTABLE RECEPTION/TRANSMISSION	260 TUNING PROBLEM	270 SPECIAL COMMUNICATION PROBLEM	280 SPECIAL RECEPTION PROBLEM
251 TUNING DRIFT	261 MANUAL TUNING PROBLEM	271 FAULTY DIALLING	281 FAULTY STEREO RECEPTION
252 FADING	262 AUTOMATIC TUNING PROBLEM	272 FAULTY CHANNEL SELECTION	282 FAULTY SUB-CHANNEL (A) FUNCTION
253 INTERMITTENT LINE/LINE BREAKING OFF	263 INCORRECT TUNING	273 FAULTY AUTO-ANSWER OPERATION	283 FAULTY SUB-CHANNEL (B) FUNCTION
254 NO OR UNSTABLE CONNECTION COMBINED WITH 'WEAK SIGNAL STRENGTH' INDICATION	264 TUNING MEMORY PROBLEM	274 FAULTY MESSAGE READ-OUT FUNCTION	284 FAULTY SSB RECEPTION
25X OTHER 'UNSTABLE RECEPTION/TRANSMISSION' PROBLEM	26X OTHER 'TUNING' PROBLEM	275 FAULTY AUTODIAL/REDIAL MEMORY	285 FAULTY RDS/VPS/PDC/XDS OPERATION
		276 FAULTY TELETEXT/CLOSE CAPTION/EPG RECEPTION	286 FAULTY TELETEXT/CLOSE CAPTION/EPG RECEPTION
		277 NO RINGING TONE	287 FAULTY SATELLITE/RTTY RECEPTION
		278 LOUD/WEAK RINGING TONE	288 FAULTY FAX OPERATION
		279 NO FAX OPERATION	289 MODEM NOT RECOGNIZED BY SYSTEM
		27A FAX DOES NOT WORK PROPERLY	28A FAULTY CALL CHARGE DISPLAY
		27B MODEM CAUSES PROBLEM WITH PHONE	28B FAULTY HANDS-FREE OPERATION
		27C NO MODEM DIAL TONE	28C SET LOCKED
		27X OTHER 'SPECIAL COMMUNICATION' PROBLEM	28X OTHER 'SPECIAL RECEPTION' PROBLEM

350 UNSTABLE PICTURE	360 POOR PICTURE RECORDING	370 SPECIAL PICTURE FUNCTION PROBLEM	380 PICTURE DISPLAY/PICKUP PROBLEM
351 SYNC PROBLEM	361 NO PICTURE RECORDING	371 EDITING PROBLEM	381 BURN MARK ON DISPLAY/PICKUP
352 PICTURE PUMPING	362 NO ERASURE PROTECTION FOR VIDEO	372 FAULTY FADING WIPER FUNCTION	382 SCRATCH ON DISPLAY/PICKUP
353 PICTURE JITTER	363 PREVIOUS VIDEO RECORDING NOT BEING ERASED	373 FAULTY NEGATIVE/POSITIVE SWITCHING FUNCTION	383 DUST/DIRT ON DISPLAY/PICKUP
354 PICTURE SHAKING (HORIZONTAL OR VERTICAL)	364 UNWANTED ERASURE OF PICTURE	374 FAULTY SUPERIMPOSE/TELOP OPERATION	384 PHOSPHOR/PIXEL MISSING ON DISPLAY/PICKUP
355 FLICKERING PICTURE	365 NO CAMERA RECORDING	375 FAULTY PICTURE IN PICTURE/DIGITAL PICTURE OPERATION	385 BRIGHT LINES IN PHOSPHOR/PIXEL
356 FLASHING PICTURE	366 ONLY ONE FIELD PER FRAME BEING RECORDED	376 FAULTY PICTURE TRANSMISSION	386 MISSING/WRONG PIXEL DEFAULTS
357 CYCLIC PICTURE MUTING	367 RECORDS ONLY A FEW FRAMES	377 FAULTY DIGITAL SHUTTER FUNCTION	387 OUT OF SPECS PIXEL DEFAULTS
358 HEAD IMPACT ERROR CAUSING UNSTABLE PICTURE	36X OTHER 'PICTURE RECORDING' PROBLEM	378 FAULTY GENLOCK FUNCTION	388 BACKGROUND BURNT IN
359 VCR SKEW/-SHIFT ERROR		379 FAULTY FLASH/STROBE FUNCTION	38X OTHER 'PICTURE DISPLAY/PICKUP' PROBLEM
35A FROZEN PICTURE		37A FAULTY DIGITAL PICTURE/ZOOMING FUNCTION	
35B JUMPING/REPEATING PICTURE		37B FAULTY AUTO-EDIT FUNCTION	
35X OTHER 'UNSTABLE PICTURE' PROBLEM		37C FAULTY PICTURE STABILIZER FUNCTION	
		37D FAULTY PICTURE CAPTURE FUNCTION	
		37E FAULTY SUBTITLING FUNCTION	
		37F FAULTY VARIABLE SPEED PLAYBACK	
		37G FAULTY VIEW- MULTI-ANGLE SWITCHING	
		37H FAULTY ASPECT RATIO SWITCHING	
		37J THUMBNAIL- OR INDEX PICTURE PROBLEM	
		37K NO BLANKING SCREEN	
		37X OTHER 'SPECIAL PICTURE FUNCTION' PROBLEM	

450 UNSTABLE COLOUR	460 POOR COLOUR RECORDING	470 SPECIAL COLOUR FUNCTION PROBLEM	480
451 COLOUR FLASHING	461 NO COLOUR RECORDING	471 FAULTY AUTOMATIC WHITE BALANCE	
452 HUE CONSTANTLY CHANGING	462 NOISY COLOUR RECORDING	472 FAULTY COLOUR EFFECTS FUNCTION	
453 FLICKERING COLOUR	46X OTHER 'COLOUR RECORDING' PROBLEM	47X OTHER 'SPECIAL COLOUR FUNCTION' PROBLEM	
454 COLOUR NOT LOCKED			
45X OTHER 'UNSTABLE COLOUR' PROBLEM			

550 UNSTABLE AUDIO	560 POOR AUDIO RECORDING	570 POOR SPECIAL AUDIO FUNCTION	580 STEREO/MULTI MODE OPERATION PROBLEM
551 JUMPING OR REPEATING AUDIO	561 AUDIO NOT BEING RECORDED	571 FAULTY FADE OPERATION	581 NO STEREO OPERATION
552 AUDIO PUMPING OR BREATHING	562 NO ERASURE PROTECTION FOR AUDIO	572 FAULTY ECHO OPERATION	582 POOR CHANNEL SEPARATION
553 AUDIO DROPOUTS	563 PREVIOUS AUDIO RECORDING NOT BEING ERASED	573 FAULTY REPEAT MODE OPERATION	583 DIFFERENCE IN LEVEL BETWEEN CHANNELS
554 CYCLIC AUDIO MUTING	564 UNWANTED ERASURE OF AUDIO	574 FAULTY AUDIO PROCESSING	584 PROBLEM WITH SURROUND SOUND MODE
555 WOW AND FLUTTER	565 MESSAGE NOT BEING RECORDED	575 FAULTY SYNC RECORDING OPERATION	585 PROBLEM WITH PCM AUDIO MODE
556 HOWLING/ACOUSTIC FEEDBACK	566 DISTORTED AUDIO RECORDING	576 FAULTY DBB DOL OPERATION	58X OTHER STEREO/MULTI MODE' PROBLEM
557 ECHO IN SOUND	56X OTHER 'AUDIO RECORDING' PROBLEM	577 FAULTY NOISE REDUCTION OPERATION	
55X OTHER 'UNSTABLE AUDIO' PROBLEM		578 FAULTY AUDIO DUB FUNCTION	
		579 FAULTY TITLE PROGRAMMING	
		57A FAULTY MIC CONTROL	
		57B FAULTY PITCH CONTROL	
		57X OTHER 'SPECIAL AUDIO FUNCTION' PROBLEM	

650 MECHANICAL INSTABILITY	660 DAMAGE TO MEDIA	670 MECHANICAL FUNCTION PROBLEM	680 LENS PROBLEM
651 UNEVEN FEET	661 TAPE GETS SCRATCHED	671 FAULTY START STOP OPERATION	681 FOCUS PROBLEM
652 FAULTY HINGE	662 DISC GETS SCRATCHED	672 FAULTY PAUSE OPERATION	682 ZOOM PROBLEM
653 VIBRATING/JUMPING	663 TAPE GETS CHEWED/WRINKLED	673 FAULTY AUTOMATIC PROGRAM SEARCH	683 IRIS PROBLEM
654 PARTS LOOSE	664 TAPE JAMMED OR BROKEN	674 FAULTY CUE REVIEW MODE	684 MACRO PROBLEM
655 DAMAGED WHEEL(S)	665 TAPE GETS CURLED	675 FAULTY SLOW MOTION OPERATION	68X OTHER LENS' PROBLEM
65X OTHER 'MECHANICAL INSTABILITY' PROBLEM	666 SLACK TAPE	676 FAULTY HIGH-SPEED SCANNING MODE	
	667 TAPE STICKING	677 FAULTY SKIP/SEARCH FUNCTION	
	66X OTHER 'SOFTWARE DAMAGE' PROBLEM	678 FAULTY REPEAT OPERATION	
		679 FAULTY RECORD REVIEW MODE	
		67A FAULTY AMS OPERATION	
		67B AUTO-REVERSE MALFUNCTION	
		67C FAULTY END DETECTION	
		67D FAULTY DISC SIDE (A-B SELECT) SWITCHING	
		67X OTHER 'MECHANICAL FUNCTION' PROBLEM	

750 PERIPHERAL PROBLEM (NON-STORAGE)	760 DATA STORAGE PROBLEM	770 SPECIAL DATA PROCESSING FUNCTION PROBLEM	780 INTERFACE PROBLEM
751 PERIPHERAL DOES NOT INITIALISE	761 FORMATTING PROBLEM	771 USB INTERFACE PROBLEM	781 USB INTERFACE PROBLEM
752 COMMUNICATION FAILURE WITH PERIPHERAL	762 DATA ON STORAGE MEDIUM BEING LOST	772 FAULTY WORD PROCESSING FUNCTION	782 PARALLEL INTERFACE PROBLEM
753 INTERNAL PERIPHERALS FAILURE	763 FRAME MEMORY PROBLEM	773 FAULTY GRAPHIC EDIT FUNCTION	783 SCSI INTERFACE PROBLEM
754 EXTERNAL PERIPHERALS FAILURE	764 READ/WRITE ERRORS	77X OTHER 'SPECIAL DATA PROCESSING FUNCTION' PROBLEM	784 SERIAL INTERFACE PROBLEM
755 NETWORK CARD ERROR	765 HARD- OR OPTICAL DRIVE PROBLEM		785 PROGRAM CANNOT BE INSTALLED
756 PERIPHERAL FAILS SELF TEST	766 FLOPPY DRIVE PROBLEM		786 PRE-LOADED PROGRAM CANNOT BE STARTED UP
75X OTHER PERIPHERAL PROBLEM	767 CD/DVD-ROM DRIVE PROBLEM		787 RE-LOADED PROGRAM CANNOT BE STARTED UP
	768 TAPE PROBLEM		788 I-LINK/FIREWIRE/IEEE1394 INTERFACE PROBLEM
	769 DRIVE WILL NOT MOUNT/CANNOT ACCESS DRIVE		789 VIRUS ALARM
	76A DISCS EXCHANGE PROBLEM		78X OTHER 'INTERFACE' PROBLEM
	76B READ/WRITE OPERATION VERY SLOW		
	76X OTHER 'DATA READ/WRITE' PROBLEM		

850 UNSTABLE PRINTER OPERATION	860 RIBBON/PAPER PROBLEMS	870	880 FAULTY FONT/CHARACTER FUNCTIONS
851 UNSTABLE PAPER LOADING	861 RIBBON BROKEN		881 INCORRECT CHARACTERS ON IMAGE
852 UNSTABLE MULTI-PAPER LOADING	862 RIBBON STUCK/STICKING		882 INCORRECT CHARACTER SIZE
853 INCORRECT LINE-UP OF CHARACTERS	863 RIBBON SOILED		883 FAULTY FONT TYPE
85X OTHER 'UNSTABLE PRINTER OPERATION' PROBLEM	864 PAPER STUCK/STICKING TO MECHANISM		88X OTHER FAULTY FONT/CHARACTER FUNCTION' PROBLEM
	865 PAPER JAM		
	866 DOCUMENT JAM		
	867 ERRONEOUS 'NO INK/-TONER' MESSAGE		
	86X OTHER 'RIBBON/PAPER' PROBLEM		

SERVICE-MODE (EN)

It is necessary to enter the Service Mode in order to carry out alignment of the TV set. Most adjustments can be made with the RCU, except the Focus and Screen voltages.

1. Service Mode Access

1.1 With the RCU, switch the TV set into the "Standby" mode.
1.2 Switch "Off" the TV set by mains supply switch (wait until LED is dark).
1.3 Whilst pressing the "Magenta (text)" button on the RCU switch "On" the TV set using the mains switch.
Continue to press the "Magenta (text)" button until the Service-setup Sub-menu appears.

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ET1 ID : S2.3          (1)

INIT      ◁ ▷          (2)
```

2. Service Menu

2.1 Navigation

- Press the ︿ / ﹀ buttons to select the menu line.
- Press the ◁ / ▷ buttons to make adjustments or selection of a menu item.

2.2 Service-Menu lines

Set-up lines (INIT,KEY,LOCK,LIMIT) -
Video lines (VG2, AGC, BKS, OS-B, PKWS, WPBS, WPGS, WPRS, BLOGS, BLORS, YD, CL).
Geometry lines (VSH, SC, VA, VS, HSH)
IF/SET-UP lines (OIF,SOC)

2.3 Activation of a line :

The first line (1) is continuously displayed. Sequential selection of the others lines in the Service Menu is possible by pressing the ︿ / ﹀ buttons on the RCU.

3. Alignment and storing new function value

3.1 The current value of the selected function is displayed in a hexadecimal form to the right of the function name. This value is adjusted by means of the RCU ◁ / ▷ buttons.
3.2 The values will be stored in the non-volatile memory when leaving the service menu or switching the TV into standby mode.

4. Temporary exit from Service Mode

4.1 To temporary leave the Service Mode, press the "Exit" button on the RCU. To access the everyday menus, press the "Menu" button on the RCU.
4.2 To return to the Service Menu, press the "Magenta" button on the RCU.

5. Leaving the Service Mode

5.1 To EXIT the Service Menu either press, the "Standby" button on the RCU or switch "Off" the mains supply to the TV.

MODE SERVICE (FR)

Le mode service sert au réglage de l'appareil. Toutes les opérations de réglage s'effectuent à l'aide de la télécommande (sauf les réglages de Focus et de tension de grille-écran).

1. Accès au mode service

1.1 Commuter le téléviseur en position de veille avec la télécommande.
1.2 Eteindre le téléviseur par l'interrupteur secteur (attendre l'extinction complète du voyant).
1.3 Maintenir la touche "Magenta (text)" enfoncée et mettre simultanément le téléviseur en marche avec l'interrupteur secteur. Ne pas relacher la touche "Magenta (text)" jusqu'à apparition du menu

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ET1 ID : S2.3          (1)

INIT                   (2)
```

2. Menu Service

2.1 Déplacement

- Appuyer sur la touche ︿ / ﹀ pour sélectionner une ligne de menu.
- Appuyer sur la touche ◁ / ▷ pour un réglage ou une sélection d'une option.

2.2 Lignes de Menus du mode service

Set-up lines (INIT,KEY,LOCK,LIMIT) -
Video lines (VG2, AGC, BKS, OS-B, PKWS, WPBS, WPGS, WPRS, BLOGS, BLORS, YD, CL).
Geometry lines (VSH, SC, VA, VS, HSH)
IF/SET-UP lines (OIF,SOC)

2.3 Sélection d'une ligne:

La premières ligne (1) du menu est toujours affichée. De courtes pressions sur la touche "︿ / ﹀" sélectionnent séquentiellement la ligne (2).

3. Réglage des fonctions sélectionnées; mémorisation

3.1 La valeur momentanée de la fonction sélectionnée est indiquée sous forme hexadécimale à droite, à coté de la position à régler et peut être modifiée avec la télécommande par la touche ◁ / ▷ .
3.2 La valeur de réglage est mémorisée dans la mémoire non volatile en sortie de mode service ou en mettant le TV en position de veille.

4. Sortie temporaire du mode service

4.1 Utiliser la touche "Exit" de la télécommande.
Le menu utilisateur peut-être accessible via la touche "Menu".
4.2 Pour entrer à nouveau dans le Menu Setup utiliser la touche magenta.

5. Sortie du mode service

5.1 Pour sortir du mode service, commuter le téléviseur en position de veille ou le mettre hors service par l'interrupteur secteur.

SERVICE-MODE (DE)

Der Service-Mode wird für den Geräteabgleich benötigt. Alle Einstellungen erfolgen mit der Fernbedienung (bis auf Fokuseinstellung und Schirmgitterspannung).

1.Service-Mode einschalten

1.1 Mit der Fernbedienung das Fernsehgerät in Stand-by schalten.
1.2 Das Gerät mit dem Netzschalter ausschalten (warten bis LED dunkel ist)
1.3 Während Sie die margentafarbene Taste (text) auf der Fernbedienung gedrückt halten, schalten Sie das Gerät mit dem Netzschalter ein. Halten Sie die margentafarbene Taste solange gedrückt bis das Service Setup Sub-Menü erscheint.

```
ET1 ID : S2.3

INIT                   (1)
                       (2)
```

2. Service Menü

2.1 Navigation

-Drücken Sie die Tasten ︿ / ﹀ zum Auswählen der Menüzeile.
-Drücken Sie die ◁ / ▷ -Tasten um eine Menüfunktion anzuwählen oder abzugleichen.

2.2 Service-Menü Zeilen

Set-up lines (INIT,KEY,LOCK,LIMIT) -
Video lines (VG2, AGC, BKS, OS-B, PKWS, WPBS, WPGS, WPRS, BLOGS, BLORS, YD, CL).
Geometry lines (VSH, SC, VA, VS, HSH)
IF/SET-UP lines (OIF,SOC)

2.3 Aktivierung einer Menüzeile:

Die erste Zeile (1) wird ständig angezeigt. Die Anwahl der Zeilen (2) im Service-Menü ist durch Drücken der ︿ / ﹀ - Tasten möglich.

3. Abgleich der gewählten Funktion und Speichern

3.1 Der momentane Wert der gewählten Funktion wird hexadezimal rechts neben der abzugleichenden Position angegeben und kann mit der Taste ◁ / ▷ auf der Fernbedienung verändert werden.
3.2 Die Werte werden nach dem Abschalten des Gerätes in Standby oder nach dem Verlassen des Service-Menüs im nichtflüchtigen Speicher (EEPROM) abgelegt.

4. Vorübergehendes verlassen des Service-Mode

4.1 Auf der Fernbedienung Exit drücken.
Mit der Tasten Menü gelangen Sie zum Menü-Übersicht.
4.2 Durch Drücken der margentafarbenen Taste gelangen Sie in das Service Setup Sub-Menü.

5. Service-Mode verlassen

5.1 Zum Verlassen des Service-Mode das Gerät in Stand By schalten oder mit dem Netzschalter ausschalten.

MODO SERVICIO (ES)

Se necesita el MODO SERVICIO para ajustar el aparato. Todos los ajustes se hacen con el mando a distancia (a excepción de la tensión del sistema, los ajustes del foco y las tensiones de la rejilla de pantalla).

1. Ajustar el Modo Servicio

1.1 Con el mando a distancia conectar a STANDBY el televisor.
1.2 Desconectar el aparato con el interruptor de la red (esperar hasta que el LED se apague).
1.3 Mientras mantiene pulsado el botón "Magenta (texto) de la UCR, pulse el interruptor general de red para encender el televisor.
Mantenga pulsado el botón "Magenta (texto)" hasta que aparezca el submenú de la configuración del servicio.

```
ET1 ID : S2.3          (1)

INIT                   (2)
```

2. Menú Servicio.

2.1 Desplazamiento
- Pulse el botón ︿ / ﹀ para seleccionar la línea del menú.
- Pulse el botón ◁ / ▷ para ajustar o seleccionar una opción del menú.

SERVICE-MODE (IT)

Il Service-Mode è necessario per l'allineamento dell'apparecchio. Tutte le regolazioni si effettuano con il telecomando. (tranne le regolazionu del fuoco e le tensioni della griglia schermo).

1. Attivazione del Service-Mode

1.1 Commutare il televisore in stand-by con il telecomando.
1.2 Spegnere l'apparecchio con l'interruttore di rete (attendere finchè il LED è spento)
1.3 Mentre tenete premuto il pulsante "Magenta (testo)" del RCU, accendete il televisore utilizzando l'interruttore di rete. Continuate a premere il pulsante "Magenta (testo)" del RCU fino all'apparizione del Service Setup Sub Menu

```
ET1 ID : S2.3

INIT                   (1)
                       (2)
```

2. Service Menu

2.1 Navigazione

- Premere i tasti ︿ / ﹀ per selezionare la linea del menu
- Premere i tasti ◁ / ▷ per la regolazione o la selezionz di un elemento del menu

2.2 Linee Service Menu

Set-up lines (INIT,KEY,LOCK,LIMIT) -
Video lines (VG2, AGC, BKS, OS-B, PKWS, WPBS, WPGS, WPRS, BLOGS, BLORS, YD, CL).
Geometry lines (VSH, SC, VA, VS, HSH)
IF/SET-UP lines (OIF,SOC)

2.3 Attivazione di una linea :

La prima linea (1) è continuamente visualizzata. La selezione delle linee sucessive (2) è possibile in service menu premendo i tasi ︿ / ﹀.

3. Taratura della funzione scelta e memorizzazione

3.1 Il valore momentaneo della funzione scelta viene indicato in formato esadecimale a destra, accanto alla posizione da allineare e può essere cambiato con il pulsante ◁ / ▷ del telecomando.
3.2 I valori verranno memorizzati nella memoria num quando verrà lasciato il menù service mode o commutando il TV in modo standby.

4. Uscita temporanea dal Service Mode

4.1 Premere Exit sul telecomando.
Al menu di uso quotidiano si accede attraverso il pulsante Menu.
4.2 Il Service Setup Sub Menu è accessibile attraverso il tasto "Magenta".

5. Disattivazione del Service-Mode

5.1 Per disattivare il Service Mode, commutare l'apparecchio in stand-by o spegnerlo con l'interruttore di rete.

Set-up lines (INIT,KEY,LOCK,LIMIT) -
Video lines (VG2, AGC, BKS, OS-B, PKWS, WPBS, WPGS, WPRS, BLOGS, BLORS, YD, CL).
Geometry lines (VSH, SC, VA, VS, HSH)
IF/SET-UP lines (OIF,SOC)

2.3 Activación de una línea :
La primera línea (1) se muestra siempre en la pantalla. La selección secuencial de las líneas (2), es posible pulsando las teclas ︿ / ﹀ .

3. Ajuste de la función elegida y almacenamiento

3.1 El valor momentáneo de la función elegida es indicado de modo hexadecimal a la derecha, al lado de la posición a ajustar, y puede cambiarse con la tecla ◁ o bien ▷ en el mando a distancia.
3.2 Los valores serán memorizados en la EEPROM al salir del menú del Modo Servicio o pasando el TV a modo standby.

4. Salida temporal del Modo Servicio

4.1 Pulse Salir en el mando a distancia.
Con el botón Menu puede acceder al menú de uso cotidiano.
4.2 Puede acceder al submenú de configuración del servicio mediante el botón "Magenta".

5. Salir del Modo Servicio

5.1 Conmute el aparato a STANDBY a fin de salir del MODO SERVICIO o desconectar con el interruptor de la red.